

AGRICULTURAL EXPANSION FOR POVERTY ERADICATION IN AFRICA

RETHINKING STRATEGY FROM A VILLAGE PERSPECTIVE

Case Study of Cameroon

By

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To Vivian, Ahone, Nkumbe and Mesime

and

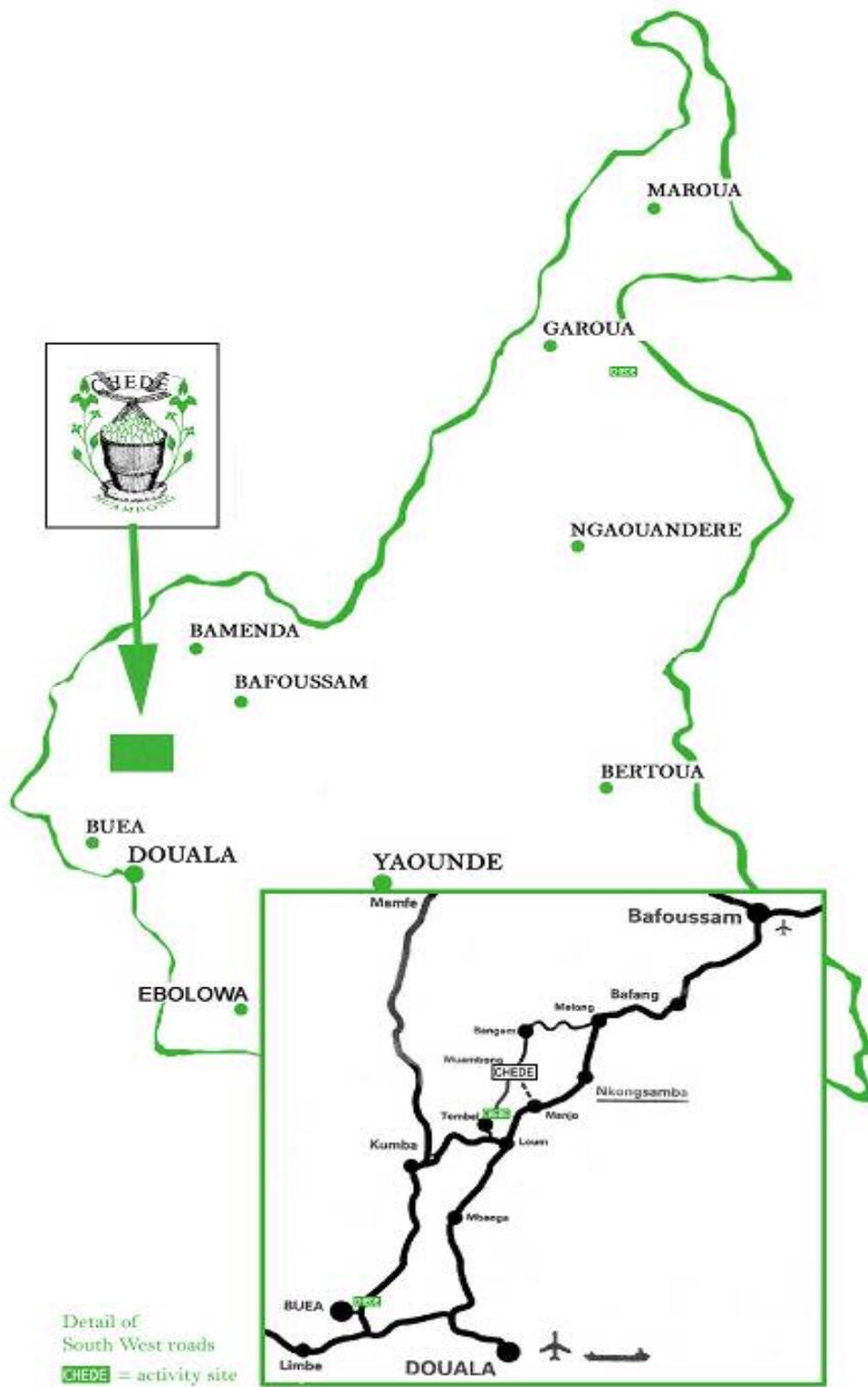
Chede community

NOTE

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Chede, a union of agricultural cooperative societies, grew out of a development project (“Chede Agric Project”) initiated in 1986 in the Muambong village community in Kupe-Muanenguba Division of the South West Province of Cameroon. The purpose of the project was to mitigate, through self-reliant efforts, the harsh effects of the economic and commodity crisis that hit Cameroon and other African countries since the mid-eighties.

Located on the banks of river Chede, which symbolizes “abundant harvest” according to local legend, the project derived its name and development motto from this river in Muambong. Originally, it sought to raise the quality and price of robusta coffee, the main export crop grown by the Muambong community, and to demonstrate the benefits of diversification to other crops, to which end the project established model farms to serve as training facilities for the farmers and to generate income for the financing of community development projects. Though still being pursued, diversification efforts have been hampered by the quasi-landlocked nature of the community and of most of the Kupe-Muanenguba Division.

The experience gained in the gestation of this project aroused the awareness of the project’s principal promoter and author of this publication of the importance of focusing national development efforts on village communities as the foundation for nation-building. From that conviction has emerged the Chede “*Village-First*” development strategy, which is explained in this study and will continue to be propounded from different angles in future Chede publications.

The original Chede project gave rise to Chede-Muambong Farmers Cooperative Society (Muafcoop) Ltd and to Chede Agric Company Ltd, the former focusing on production and the latter on instrumentation and marketing, including local and export marketing. In order to emphasize the non-lucrative and community development objectives of the Chede system, and serve a wider constituency of Cameroonian farmers, the company was replaced in 2002 by Chede Union of Cooperative Societies (Chede Ltd, in short), of which Chede-Muafcoop is currently the most important affiliate. Other affiliates include cassava, plantain, pineapple, and passion fruit producer common initiative groups or cooperatives based for now mostly in the South West and Littoral Provinces of Cameroon.

The Chede farmers’ cooperative model and development concept are also being promoted in other African countries, especially within the CEMAC sub-region. An international development network is also emerging in Europe, constituted by Chede development NGOs in France, Netherlands, Switzerland, and the United Kingdom. The main purpose of these chapters, still to be fully operational, is to mobilise resources abroad in support of Chede’s services to farmers in Cameroon and elsewhere in Africa by providing training and project management services, production equipment and inputs and agro-processing technologies. They are also to promote and distribute Cameroonian/African exports to the European market and thus mitigate the global demand-side challenges facing small-scale exporters, as explained in this study. In the process, the chapters equally build up awareness and support in Europe for NEPAD and MDG, whose policy prescriptions have admirably caught up, like the PRSP itself, with Chede’s 18-year- old poverty reduction struggle.

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ACRONYMS

AfDB	African Development Bank
AGOA	African Growth and Opportunity Act
AGROCOM	Agriculture and Commercialisation
APC	African, Caribbean and Pacific Countries
CARBAP	African Research Centre on Banana and Plantain
ANTIC	National Information and Communication Technology Agency
CAS	Country Assistance Strategy (of the World Bank)
CCSP	Coffee and Cocoa Seedling Project
CDC	Cameroon Development Corporation
CEMAC	Central African Economic and Monetary Community
CENEEMA	Centre for Studies and Experimentation in Agricultural Mechanization
CGIAR	Consultative Group on International Agricultural Research
CIRAD	French Agricultural Research Centre for International Development
COLEACP	Europe-Africa-Caribbean-Pacific-Liaison Committee for the promotion of horticultural exports
ECA	United Nations Economic Commission for Africa
ENS	National Engineering School
ENSTP	National School of Public Works
ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FONADER	National Fund for Rural Development
GDP	Gross Domestic Product
HIPC	Heavily Indebted Poor Countries Initiative
IFAD	International Fund for Agricultural Development
IFS	International Foundation for Science
IITA	International Institute of Tropical agriculture
IMPM	Institute for Medical Research and Medicinal Plants
IRAD	Agricultural Research Institute for Development
IRAF	Agriculture and Forestry Research Institute
IRRI	International Rice Research Institute
IRZ	Zootechnical Research Institute
ITC	International Trade Centre/UNCTAD/WTO
JITAP	Joint Integrated Technical Assistance Programme (of ITC)
KMD	Kupe-Muanenguba Division (of the South West Province of Cameroon)
MIDEVIV	Authority for the Development of Food, Fruit and Vegetable crops
MDG	Millennium Development Goals (of the United Nations)
MINATD	Ministry of Territorial Administration and Decentralization
MINAGRI	Ministry of Agriculture
MINEF	Ministry of Environment and Forestry
MINEPAT	Ministry of Economic affairs, Programming and Development
MINDIC	Ministry of Industrial and Commercial Development
MINEPIA	Ministry of Livestock, Fisheries and Animal Industries
MINESUP	Ministry of Higher Education
MINFI	Ministry of Finance and Budget
MINPOSTEL	Ministry of Posts and Telecommunication
MINREST	Ministry of Scientific Research and Technology

MINTP	Ministry of Public Works
MT	Metric tonne
MTS	Multilateral Trading System
NEPAD	New Partnership for Africa's Development
NPMB	National Produce Marketing Board
NSERR	New Rural Road Maintenance Strategy
OECD	Organization for Economic Cooperation and Development
ONAREST	National Council for Scientific Research and Technology
OPEC	Organization of Petroleum Exporting Countries
PDEA	Project for the Development of Agricultural Exports
PNDP	National Participatory Development Programme
PNVRA	Agricultural Research and Extension Programme
PRSP	Poverty Reduction Strategy Paper
R&D	Research and Development
RMI	Road Management Initiative (of the World Bank)
S&T	Science and Technology
SPAAR	Special Programme on African Agricultural Research
UDEAC	Economic and Customs Union of Central Africa (CEMAC's predecessor)
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNTACDA	United Nations Transport and Communications Decade for Africa
UN-NADAF	United Nations New Agenda for the Development of Africa in the 1990s
USAID	United States Agency for International Development
WARDA	West Africa Rice Development Association
WTO	World Trade Organization

FOREWORD

This work extrapolates on a national scale close to twenty years of empirical experience gained in the development of an agricultural project in an African village community. That village-level insight has been complemented by the author's equally long familiarity with international development programmes conducted notably by the United Nations system of organizations. The lessons derived from that project and development challenges analysed herein are relevant to most countries of Sub-Saharan Africa.

The author does not claim to have found some radical therapy for the poor health of Africa's development. Also not new are the main analytic tools used, namely decentralization to the village level; viable nation-wide rural road network; expanded science and technology applications to rural agriculture; efficient producer-support services and institutions; and high-performing marketing organizations. Nevertheless, the emphasis placed on the logical inter-relationships and sequencing of these elements so as to energize the rural farming population of smallholders to ignite a green revolution may prove to be an innovative contribution to the African development debate.

Furthermore, the village is used as point of departure for framing a national development strategy tap-rooted in Africa's cultural heritage as can still be found in village communities. Agriculture being the predominant activity of these communities, their cultural, social and economic welfare, that is eradication of poverty in the rural sector, can be ensured only through the expansion of agricultural production and processing, considered as the locomotive pulling all other sectors under an economic growth strategy inclusive of all segments of the population. The means of instrumentation to be employed to that end form the substance of this work.

Two important findings deserve to be underlined. The first is that decentralization to the local level, as now envisaged in Cameroon for example, can serve as an opportunity consistent with constitutional provisions to revive and renovate traditional governance systems ("*democratic village governments*") that would motivate village communities to take comprehensive charge of their well-being and to become involved owners like other Cameroonians of the nation-building process. The merit of this innovation would be to bridge the present divide between "traditional Africa" in the rural sector and "modern Africa" in the urban sector. The author demonstrates in some detail how these two halves of Africa, now back to back, can finally conjoin into one coherent African reincarnation.

The second finding is that a national development strategy that places the modernization of village communities (rural sector development) at the very top of national investment priorities produces more multiplier benefits for the nation than any other. Those benefits include, for example, smallholder agricultural expansion feeding industrial and economic growth; expanding employment and poverty eradication in the rural areas and therefore limited emigration of the rural productive force to the cities, which in turn should result in improved quality of city life without exorbitant demands on public expenditures for continuous urban infrastructure upgrades; equalization of incomes and living standards between urban and rural sectors as well as among all ethnic groups, thereby levelling the national economic playing field for the entire population; considerably reduced crime rate in the cities; and nipping the root causes of migration abroad and of sectarian rebellions such as now witnessed in Darfur, Nigeria's Delta region or northern

Uganda. These, in other words, are the benefits to be harvested from a “*village-first*” development approach discussed in detail in chapter 3 on decentralization.

In the above context, the author comments on the perceived relevance and weaknesses of some past and ongoing agricultural and rural development projects funded by the international donor community in Cameroon, especially the World Bank, International Fund for Agricultural Development (IFAD) and African Development Bank (AfDB). It is hoped that the comments will serve as inputs to the design of similar future projects in Cameroon and other African countries.

A number of references are also made to the Cameroon government’s Poverty Reduction Strategy Paper (PRSP: August 2003). The issues discussed herein intersect in important ways with the themes and analysis contained in the PRSP. However, the latter’s scope is necessarily much broader than the reach of this publication which concentrates on the agricultural sector, and more particularly on rural agriculture, as the desirable driver of other productive sectors. The author highlights what he considers to be weak points in the PRSP, the most important being the absence of specific mention of science and technology (S&T) development among the seven strategic priorities listed in the PRSP or as a cross-cutting strategic priority mainstreaming the document. In that respect, this work sharpens the focus on S&T as a primary instrument for engineering development outcomes. Another perceived weak point in the PRSP is its inadequate emphasis, relative to the objective reality of Cameroon’s present road network, on rural road infrastructure provision as probably the one factor likely to control the attainment of the other strategic objectives of the PRSP.

Indeed, the author reveals, with the help of FAO agricultural production data going back to 1961 and comparisons with Côte d’Ivoire, Ghana, Malaysia and Costa Rica, that although Cameroon’s agricultural potential surpasses that of these other comparator countries, it nevertheless ended up being at the bottom of the agricultural production index for the period 1961-2003, both for export commodities and food crops. This puzzling finding in a way validates the conceptual underpinning of the strategy proposed in this work since the factors behind Cameroon’s under-performance have been explained in detail, chapter by chapter. The three factors that command attention are (1) a highly centralized governance system in place since independence and which has virtually choked rural agricultural development since then; (2) grossly inadequate rural infrastructure provision and maintenance – also due to excessive centralization of government services; and (3) limited S&T capacity within an extension system hardly supportive of rural smallholders, again mostly due to poor transport infrastructures and to the inaccessibility of much of the rural population.

Yet another major difference between the PRSP and this study is that while the former document uses economic growth and macro-economic stability as the sequence of factors expected to reduce poverty, this study uses a somewhat (unconventional) converse sequence of causation: investments in rural/village community development (especially decentralization and nation-wide rural road system and utilities) leading to the expansion of agricultural production and employment, which should result in sustained poverty reduction in the rural sector, and all of which would accelerate domestic and external trade as well as industrial development and GDP growth, leading to macro equilibrium. This sequence of causation, which strikes at the deep root of poverty affliction in the country, is the one the village expects from the government and the PRSP.

It is hoped that some elements of the strategy deployed in this work will be useful to all stakeholders concerned in the formulation and reviews of PRSPs for African countries, including the next review of the PRSP for Cameroon.

HIGHLIGHTS

THE TURN OF THE AFRICAN FARMER

Michael Njume-Ebong

Unlike the salaried workers, the African farmer is not covered by any social security net. For him there is no pension, no housing subsidies, no children's education allowance, no paid vacations, hardly any adequate healthcare or subsidized public transport. He enjoys no expressways, no lighted streets, no postal and telecommunication services and the rest of those basic amenities heavily financed from his labour's harvest but which only very rarely extend to his perimeter.

The African farmer has no insurance against droughts, locusts, famine, political misrule or national economic mismanagement, referred to as "economic crisis". Not only is the African farmer hardest hit by such crises but he must continue to produce more to replenish state coffers, keep the mismanagers on the payroll and pay for foreign debts contracted for projects that eluded the rural sector. Indeed, Africa would be a much greener pasture for all if Africans in government service worked with the same zeal and love for future generations, with the same stoic integrity and spirit of sacrifice as the African peasantry. This silent drama of the farmer in Africa deserves the timely attention of the international community.

Africa's political and technocratic leadership of the past decades, with the advice of thousands of foreign experts, has piloted the continent to its present crash mainly because of bureaucratic-driven, urban-oriented, and big-project-centred development strategies, which literally denied the needs and aspirations of the vast majority of the population – the African peasantry.

The advent of democracy, of human rights and right to development for all, promises a radical shifting of roles and players. The time for the majority, for the African farmer, has dawned. He should now take his turn: social security, incentive structure, subsidies, privileges, respect and recognition, which heretofore have been the exclusive preserve of the government civil servant.

With such a reversal of roles, the African farmer could work for Africa the same development miracles performed by farmers elsewhere in the world.

Source: extract from "Time to Save the African Farmer", article by the author in UN Special, December 1994, United Nations Office at Geneva.

This study discusses agricultural development in Africa as a strategy for poverty eradication, using Cameroon as case study and the village as vantage-point. The South West Province of Cameroon and more particularly Kupe-Muanenguba Division of that Province serve as points of reference. The focus is on small and medium-size farmers concentrated in the rural sector, and on crop production exclusive of forestry, livestock and fisheries. However, the

findings are equally relevant to these other agricultural sub-sectors. The purpose at hand is to identify the main factors currently inhibiting the full realization of Cameroon's immense agricultural potential and construct a community development (village-empowering) strategy necessary to overcome the constraints in question in order to produce a green revolution.

To be effective in its multiplier effects and on a sustainable long-term basis, the strategy being proposed should fulfil three key conditions. Firstly, it should be rooted in village/farming communities whose comprehensive development needs - from decentralization and infrastructure provision to democratic village governance - would have to be addressed as an overriding national priority. Secondly, it should be inter-sectoral in its thrust, priority being given to a logical, mutually reinforcing integration of the five major components itemized below. And thirdly, its bottom-up formulation and implementation arrangements should integrate and synchronize the inputs of all the principal stakeholders (village communities, all development ministries, donor community, and private sector) through a tight coordination mechanism under the Prime Minister's authority and accountability. Such a multi-stakeholder integrated strategy beamed on the village level is considered indispensable to the transformation and modernization of the agricultural sector as the means to reducing poverty and stimulating economic and industrial growth. Without such an approach, the risks would be that:

- (1) The PRSP for Cameroon would almost certainly miss its GDP growth targets for the rest of the decade, as explained later in the text, and in any event even meeting the targets would neither reduce poverty in the countryside nor be sustainable over the long haul.
- (2) Ongoing rural development and poverty-eradication programmes supported by the international donor community would have only limited or widely uneven impact, if at all, on reducing endemic poverty in the rural sector where resides the majority of the population, and such an outcome would further aggravate existing inter-ethnic and urban-rural disparities in the distribution of national development assets and opportunities; and
- (3) Cameroon (and other African countries) would miss, as in the past decades, the opportunity of using its strategic asset, which lies in the agricultural sector, as the foundation for economic expansion, industrialization, and competition in an increasingly liberal global market environment.

However, the above thesis is challenged by some economic researchers who hold that a national development strategy centred on the exploitation and export of natural resources traps the population in a low S&T bind that discourages institutional innovation and high-value manufacturing for the global market. It is also questionable logic to encourage, as this author does, increased production and export of primary commodities such as coffee and cocoa beans, the prices of which have been sliding for decades on the world market. Chapter 1 therefore addresses these and related issues heating up the debate on the future of Africa's commodity sector in regard to the workings of the global marketplace. The chapter contrasts the analyses and conclusions of two economic research camps, the pessimistic and the optimistic, as to whether a country's endowment in natural resources (as in many African countries) is a development curse or a development opportunity.

In order to validate the conceptual foundation of our strategy, Chapter 2 compares Cameroon's agricultural potential with that of Côte d'Ivoire, Ghana, Malaysia and Costa Rica, as well as their respective shares of global production of selected export commodities and food crops from 1961 to 2003. A composite performance index for the five countries shows that in the

area of export crops (coffee, cocoa, palm oil fruits, bananas, and pineapple) Cameroon hardly did better than tiny Costa Rica (population: 4 million and barely 10 per cent of Cameroon's arable land), and that in the area of food crops production (cassava, plantains, yams, cocoyams, maize, tomatoes and onions) Cameroon was again outperformed substantially by Côte d'Ivoire and Ghana. The statistical comparisons leave no doubt that Cameroon has since independence in 1960 under-utilized and probably even neglected its agricultural potential, shown to be superior to that of the other countries studied. The rest of the analysis proceeds to demonstrate, chapter by chapter, why that has been the case. The reasons are both sector-specific and organizational; but a somewhat startling finding is that excessive centralization of government at the top has failed to achieve intra-governmental or inter-ministerial coordination focused on poverty reduction in the rural sector. Indeed, most of the factors explaining Cameroon's comparatively poor performance in agricultural output since independence lie outside the competence of the Ministry of Agriculture (MINAGRI), as summarised below.

Limited devolution of administrative authority and resources to local level

This is the first strategic constraint, discussed in chapter 3, on agricultural and rural development in Cameroon, which is shown in the text to rank 26th out of 30 African countries studied in terms of their relative degree of political, administrative and fiscal decentralization, with Ghana and Côte d'Ivoire, both of which outperformed Cameroon in agricultural production, being in 4th and 13th position respectively. The gravity of this finding for Cameroon is that even those African countries rated as relatively more decentralized are in fact quite centralized in comparison with international best practices, especially with respect to fiscal decentralization. Accordingly, the first prerequisite for enhancing agricultural production in the rural sector is to remove this constraint by implementing a thorough system of decentralization and accountability from the centre in Yaoundé to representative local authorities, right down to village level. Responsibility for attaining this objective lies with the Ministry of Territorial Administration and Decentralization. The adoption at long last, in July 2004, of the law on decentralization, which creates regional and communal councils, is likely to remove this stumbling block.

However, the law exists for now only on paper and it may take unknown additional years for the local authorities to become fully equipped and operational throughout the country. The findings of this study suggest the need for urgency in implementing the new system of decentralization so as to bring decision-making authority and resources as close as possible to the rural communities. That way they would be centrally involved in the choice, design and implementation of programmes and delivery of services of which they are the direct beneficiaries. This concerns in particular the building of rural infrastructures, operation of extension services and distribution of farm inputs. Even more crucial is whether and how decentralization of government services will strengthen native institutions of village community governance, such as chieftaincies, making them full partners in nation-building from the grassroots upwards. That should help erase the present divide between "traditional Africa" and "modern Africa". It would also equalize development opportunities and benefits for urban and rural populations and for all ethnic groups of the nation. This portion of the discussion is developed at length in the text in view of its importance to the future of the state system in Cameroon and in other African countries.

The landlocked nature of most farming communities

Chapter 4 covers this major obstacle to agricultural expansion by the smallholders. The lack of all season farm-to-market roads hinders commercial agriculture and investments in the rural sector because of the prohibitively high costs of moving produce to markets and transit centres in Douala and Yaoundé. It also hinders community development in general since poor rural transport systems significantly increase the costs of providing utilities and building houses, schools, healthcare centres, water and sanitation systems, or produce warehouses. Clearing this obstacle requires a nation-wide, all-season feeder road network integrating all the rural districts with major urban population centres. Responsibility for implementing such a road network devolves to the Ministry of Transport and Public Works.

It is reasonable to surmise that just by removing the first two major constraints outlined above (administrative and resource decentralization to rural municipalities, on the one hand, and availability of a nationwide inter-district road network, on the other) should motivate rural producers to increase their output by at least 5 per cent per annum, as a result of significantly reduced post-harvest losses due to present widespread produce evacuation problems. Further, it would become economically viable for domestic and foreign entrepreneurs to invest in commercial agriculture in the rural zones. This is currently impossible since no bank or entrepreneur will invest money in agricultural production in a landlocked area, however fertile.

Remedial measures envisaged by the government in the PRSP, notably the new strategy for the rehabilitation of rural roads (NSERR), seriously under-estimate this handicap to achieving the objectives of the PRSP, including poverty eradication in the rural sector. Cameroon's existing infrastructure backwardness is reflected in the following stark comparisons: its current total road network density (paved and unpaved roads) is 7.2 per cent of its surface area, compared to 15.6 per cent for Côte d'Ivoire; 16.5 per cent for Ghana; 20 per cent for Malaysia; and 70 per cent for Costa Rica. As will be seen later, Cameroon has consistently lagged behind all these other countries in infrastructure assets since 1960. No surprise therefore that the comparator countries have done much better than Cameroon in agricultural production and that Cameroon's poverty rate is at present is the highest among the countries studied. This comparison points to the considerable investments Cameroon will have to devote to nation-wide road building just to catch up with Côte d'Ivoire for example, not to mention the fact that the existing road network is in serious disrepair, especially in the rural sector.

The above findings reveal the extent to which the PRSP and NSERR have understated the problem. This study proposes a more robust, three-pronged solution, which stands on the premise that the gravity of Cameroon's road infrastructure deficit is mirrored in the equal gravity of its current poverty levels, which are approaching emergency proportions, especially in much of the landlocked countryside. This unsustainable situation therefore represents a threat to national security in terms of social cohesion and human dignity. That calls for national mobilization requiring, firstly, the expansion of the army's engineering arm to spearhead rural road construction, especially in more topographically handicapped or hilly rural areas; secondly the creation of a national volunteer corps schooled in military discipline and fitted with development combat attire to support the army, especially in maintenance tasks; and thirdly upgrading and expansion of the National School of Public Works (ENSTP), with feeder affiliates in each Province/Region, to ensure that it has the capacity to accelerate training of public works engineers and technicians, and to develop or source from outside advanced road and bridge building technologies and convert local materials for the same purpose.

Limited S&T applications to the agricultural sector and extension system

Chapter 5 summarises the very limited S&T intensity in Africa, which partly explains the region's lagging development efforts and continuing marginalization in world trade, which is increasingly driven by S&T innovations. In the light of a national S&T system that would be desirable for a typical African country, Cameroon's current S&T establishment is judged to be weak, starved for funds, and not properly coordinated to advance the country's strategic development goals, such as in agriculture where limited S&T solutions represent the third major constraint on the expansion of production by smallholders. S&T issues, which also fall outside the direct jurisdiction of MINAGRI, cover the entire range of farmers' needs.

The following are a few key examples: (a) research and development (R&D) directed towards new and improved agricultural inputs, especially planting material and breeding stock, and pursuing the objective of increased productivity and quality and horizontal diversification; (b) development of agricultural machinery and mechanized solutions, including irrigation systems, suited to small and medium-size producers; (c) upgrading the product-specific technological capabilities of the national agricultural extension personnel so that they are able to test, validate and disseminate new R&D products and solutions, and train rural farmers in efficient production methods and farm management; and (d) research and applications aimed at agro-industries in order to raise the technological content of agricultural production and thereby stimulate value-addition through vertical diversification of production. To that may also be added the lack of culinary S&T initiatives to feed the development of a national gastronomic industry and trademark, and also expand employment opportunities.

Although the National Agricultural Research Institute for Development (IRAD) has done some work under item (a) above, much more remains to be done to improve the varietal quality and yield of crops currently grown or which can potentially be grown to expand diversification. Since the collapse of the Centre for Studies and Experimentation in Agricultural Mechanization (CENEEMA) in the late 1980s, there has been no further S&T focus on rural agricultural machinery. CENEEMA should therefore be re-established as a public-private partnership initiative drawing upon the expertise and experience of other developing countries, especially in Asia. Under item (c) S&T products and issues have yet to be mainstreamed within the national agricultural extension system uniformly in all provinces, despite some donor-supported projects in this area, as will be seen later. In reality the extension system does not constitute at present the vital transmission belt it should be between IRAD and agricultural training institutions in the country, on the one hand, and rural farmers, on the other.

Government has been aware of that problem but its efforts thus far to increase collaboration between IRAD and the extension system have yielded only mixed results from one Province of the country to another. In any event, IRAD's research capacity has been seriously curtailed since the onset of Cameroon's economic crisis in the mid-1980s. With respect to food manufacturing, the University of Ngaoundéré specialises in this area. But the main problem is the very limited and low-level private-sector food industry in the country stimulating the demand for research in this sector. The University of Ngaoundéré should further strengthen its linkages with the gradually emerging small-scale food processing industry by devising solutions adapted to this sub-sector and also focusing on food processing in the rural areas, which currently is not the case. Culinary S&T is yet another area that needs to be developed to expand employment creation and establish a national gastronomic trademark. The government should, through fiscal

and other incentives, also encourage domestic and direct foreign investment in local food manufacturing. Best practice examples in other countries are mentioned in the text.

Underdeveloped producer-support institutions and services

As shown in chapter 6, producer-support institutions and services are either inadequate or disorganised nation-wide. Responsibility for this area is shared by four Ministries, namely Agriculture; Livestock, Fisheries and Animal Industries; Industrial and Commercial Development; and Finance. The institutions and services in question include, for example: farmer banks and other agricultural credit facilities; seed production and distribution enterprises; and fertilizer and other inputs. In the area of agricultural credit in particular, various stop-gap initiatives included in project packages funded by international donors have proved inadequate since the dissolution of FONADER (*Fonds National du Développement Rural*) in the early 1990s. As a result, farmers in the South West province especially have lacked access to credit for many years, and this deprivation has certainly had adverse effects on agricultural output. The government's new Micro-Finance Programme, which seeks to improve access by rural smallholders to micro-financing, remains to be deployed, but does not appear on paper to be an adequate and effective solution responsive to current needs.

With respect to the seed production and distribution sub-sector, which has been liberalised except for coffee and cocoa seedlings, only a handful of seed companies stocking planting materials for food, fruit and vegetable crops exist in the country. There is as yet no regulatory system in place to ensure that the materials they sell are certified and of the highest quality standard. The fertilizer and pesticide sub-sector also has been privatised. It remains doubtful if poor rural farmers can afford the market prices for these inputs previously subsidized by the government, the implication being that without fertilizer to boost production and pesticide to kill off weeds, rural agricultural output will either remain low or continue to decline. The study demonstrates the need for the government to remain fully engaged in enhancing the effectiveness of producer-support institutions and services until a well-regulated private sector is in place and able to fill the present big gap in this area.

The marketing challenge

Profitable marketing of farmers' output raises their incomes and motivates them to higher levels of production. However, agricultural development projects in Cameroon, including those supported by the international donor community, have generally tended to down-play or neglect the importance of the commercial dimension to the sustainability of the projects in question and to the eradication of rural poverty. Producer organizations with domestic, regional and export marketing capabilities are few and far between, as documented in chapter 7. But even if the centrality of marketing to enhanced agricultural production had been fully recognised, the constraints examined above, particularly the very poor transport infrastructures in the rural areas, would still seriously hamper profitable produce marketing in Cameroon and in the CEMAC sub-region, meaning therefore that most rural farmers would have little incentive to produce beyond their subsistence needs and that they would remain stuck in poverty.

Produce marketing becomes even more difficult at the regional and global export levels where supply-side constraints reinforce one another to the point where small-scale exporters find it virtually impossible to face the demand-side requirements of competitive prices, top-of-the-

line product quality, regularity of shipments, and long cash turn-around cycles that must be endured without bank credit. The perception on the global market of African exporters as being unreliable suppliers – due to the various constraints reviewed earlier- as well as instances of commercial malpractices on the demand side, all but compound the challenges facing Cameroonian and other African exporters.

Yet there are opportunities to be reaped from the increasing emphasis African countries are placing on sub-regional and regional economic and trade integration, as advocated for example by the New Partnership for Africa's Development (NEPAD). At the inter-regional and global levels, opportunities are provided by the US government's African Growth and Opportunity Act (AGOA), which accords duty-free and quota-free treatment to a range of African exports to the US market, the ACP-EU Cotonou Agreement which also offers generous trade conditions, and by the expected liberalisation of international trade in the food and agriculture sector on the Doha agenda at the World Trade Organization (WTO).

However, Cameroon and other African countries would find it exceedingly difficult to derive benefits from the above-mentioned arrangements and the opportunities they offer for poverty eradication if they do not put in place an integrated strategy designed to remove or at least mitigate the adverse factors described above, which hinder agricultural expansion by rural farmers, and other supply-side handicaps affecting domestic and export-marketing of farmers' produce.

Strategy

A strategy for agricultural expansion for poverty eradication briefly outlined in chapter 8 should not concern only MINAGRI, as has been the case until now in Cameroon. It should first and foremost be owned by village communities, and should therefore be formulated from the village level upwards. Its implementation and periodic reviews should be the responsibility of an inter-ministerial and multi-stakeholder arrangement, in which farmers have a major voice and role, and chaired either by the Prime Minister or the President to reflect the overriding importance that the government assigns to agricultural production as driver of industrial and economic growth. Since the strategy would focus on smallholders who reside in the rural sector, it would simply boil down to an integrated rural development campaign involving all development ministries, including finance and territorial administration and decentralization. Design and implementation of the strategy would require, as sine qua non for success and effectiveness, a high degree of coordination and synchronisation of the policies, funding, and operations of all the ministries concerned, domestic partners such as the private sector and farmers' organizations, as well as the donor community and foreign investors, all focused on stimulating the rural population to spark a green revolution for Cameroon.

As used in this study, "village community" and "rural community" are synonymous. Municipality, commune and district are also used interchangeably as the smallest self-governing unit in the administrative organization of the country. "Division" corresponds to "Département" and "Sub-Division" to "Arrondissement" in the French language. In the present Cameroon context, a rural community may have several or all of the following characteristics: (a) it is not linked to a major urban centre by a tarred or express road; (b) its resident population is generally (but not necessarily) less than 2 000 inhabitants; (c) its economy is solely or primarily agricultural both for cash-crop and subsistence farming; (d) it is either not covered or very poorly covered by the national telecommunication network, postal services and other public utilities

such as electricity and water supply; (e) no banking services exist other than traditional savings and credit schemes usually called “tontines”.

Although World Bank data estimate the proportion of Cameroon’s urban population at about 50 per cent, this figure seems too high when the above criteria are applied to the prevailing situation in the country. It should moreover be observed that other data indicate that close to 70 per cent of the country’s population is engaged in agriculture. Furthermore, some population centres in Cameroon are more “urban” than others where a majority of the population is essentially agrarian. This is especially the case in the South West Province, which may be considered mostly rural in character in the light of the above characteristics of what constitutes a “rural community”. The more or less urbanized centres in the South West are: Buea (Provincial capital), Kumba, Limbe, Mamfe, Muea, Muyuka, and Tiko. Of these seven centres, four are located in Fako Division, making it the most “urbanized” Division in the Province, but in no way even remotely close in its degree of urbanization to the Littoral, Centre, Western and Northern Provinces, for example.

It is also worthy of note that about 80 per cent of the paved road network in the South West is concentrated in Fako, where also are located the bulk of CDC and Delmonte plantations and the national petroleum refining industry (SONARA). In terms of urbanization and paved roads, Meme Division, where Kumba represents the Province’s largest urban centre, is a distant second to Fako. Next is Manyu Division where Mamfe is a commercial centre worthy of note. The other three Divisions (Kupe-Muanenguba, Lebialem, and Ndian) have quasi-urban settlements such as Bangem, Tombel, Nguti, Mundemba, Ekondo Titi, and Fontem, whose inhabitants are mostly farmers and may therefore qualify as essentially rural communities. These three Divisions also have no paved roads whatsoever and most of their communities are more severely landlocked than elsewhere in the Province. Not surprisingly, subsistence farming is more predominant in the three Divisions than in the rest of the South West, and poverty levels are probably among the highest in the country.

This work derives lessons not only from the Chede project in Muambong in Kupe-Muanenguba Division, and the situation of the rural farmers in the rest of the South West Province, but also from other countries in Asia and Latin America with comparable agriculture-based economies in order to identify best practices which can be adopted in Cameroon and other African countries. In this sense, the subject and substance of this research bear relevance to ongoing implementation of some high-profile programmes currently supported by the international donor community in Africa, such as the NEPAD framework programme; Heavily-Indebted Poor Countries Initiative (HIPC); and the United Nations Millennium Development Goals (UN/MDG), all of which make poverty eradication in Africa their prime objective. The findings should equally illuminate areas deserving more emphasis in the operational deployment of the ACP-EU Partnership (Cotonou) Agreement and AGOA.

1. AFRICA'S COMMODITY PROBLEMS IN PERSPECTIVE

“It is the failure in the commodity sector which has been central to the economic crisis facing Africa – as both a contributor and a casualty”¹

1.1 The debate on national development strategies centred on export commodities

It would seem unwise to advocate the revitalisation of the commodity sector in Africa to spur economic growth using a strategy based, among other things, on increased production of primary commodities such as cocoa or coffee, whose prices on the world market have been falling for decades, which are not that much consumed by Africans themselves, and which leave African economies at the mercy of market forces, dietary habits, and technological changes in the importing industrial countries. This valid concern has been addressed over the years in the academic and international economic research community. The arguments for and against such a strategy are summarised in a recent publication by the OECD Development Centre entitled *Export Diversification in low-income countries: An international challenge after Doha*². The authors contrast the views of two research camps which have studied the performance of developing economies heavily dependent for their growth on natural resource exploitation and exports. One camp is pessimistic and the other is optimistic about the growth prospects of such economies, concentrated in Africa.

According to the pessimistic school of thought, heavy dependence on natural resources (as opposed to manufacturing) would seem to have the following drawbacks:

- It produces the “paradox of impoverishing abundance” or “resource curse” noted in the apparent correlation between commodity dependence and slower growth rates on the one hand and relatively limited accumulation of human and institutional capital on the other;
- Low-income elasticity of world demand for primary commodities depresses export revenues and terms of trade, producing detrimental effects on balance of payments;
- Emphasis on commodity production traps the labour force in low-skill activities providing scant opportunities for technological innovations, especially if linkages are absent or limited with the rest of the economy;
- A boom in natural resources has the potential to divert capital from the manufacturing sector and if the real exchange rate appreciates, such a boom could hurt the country's competitiveness on the world market;
- Countries abundant in natural resources have weaker incentives to industrialise because their commodity export earnings can finance their imports without their having to industrialise;

¹ Africa's commodity problems: towards a solution, United Nations publication, UNCTAD/EDM/ATF/1, 1990.

² OECD Technical Papers No. 209 by Federico Bonaglia and Kiichiro Fukasaku, OECD Development Centre, Paris, June 2003.

- The relative abundance of land (per worker) and scarcity of skill (per worker) typical of many African countries would explain why these countries have in general not specialised in manufactured exports, compared to “the skill-abundant and land-scarce East Asian economies” for example.

The optimistic research camp disagrees with some of the views outlined above and makes the following case in favour of commodity-based strategies whereby countries rich in natural resources are encouraged to use them, not sit on them:

- Historical examples in the developed and developing countries (e.g. Australia, Canada, Scandinavian countries, USA, Brazil, Chile, South Africa, or Uruguay), which are rich in natural resources, have proved that resource-based activities can stimulate economic growth over long periods;
- Successful examples in some resource-rich developing countries, such as those cited above, suggest the range of policy options that can be employed to make natural resources a development asset that can spur economic growth, especially by encouraging export diversification and reducing dependence on a limited basket of export commodities;
- The pessimistic camp seems to get it wrong because it focuses on too short a time span and uses doubtful econometric techniques; when a longer time span is considered and the possibility of omitted variables is factored into the equation, the negative effect of natural resource abundance on economic growth would become less obvious;
- Beyond traditional factor endowments, other variables such as infrastructure, macro-economic policy, trade policy, and the quality of human resources and institutions, also contribute to a country’s development and to shaping its export and growth performance;
- Development failures exist in both resource-rich and resource-poor countries in the world; but the resource-rich countries able to manage their resources wisely have more opportunities to invest and perform better than the resource-poor ones;
- What may be detrimental to development and growth is not dependence as such on natural resources but rather the high concentration on commodity exports subject to significant international price fluctuations.

The above opposite viewpoints of both research camps can all be considered valid depending on the context, which can vary considerably from country to country, and which also encompasses developments in the international trading system. In the view of this author, that context is provided, in the domestic realm, by the quality of a country’s political institutions and processes, as well as government’s vision and managerial skills necessary to build and continuously develop the strategic instruments indispensable to harnessing natural resources – agricultural and mineral – to serve as an engine of economic growth and poverty eradication. The instruments in question include, for example: a decentralized system of governance giving democratic voice and development opportunities to all segments of the population, especially at the grass-roots; high-quality educational and research institutions driven by a national science and technology policy oriented to the transformation of natural resources; nation-wide physical infrastructure integrative of the rural sector; macro-economic policies that stimulate export trade as well as domestic and foreign investments in the transformation of natural resources; and an efficient, dedicated public administration that facilitates all the above.

The international context relates to the working of multilateral trade agreements and in particular to the political will necessary to ensure that such agreements are consistent, in letter and spirit, with the solemn commitments of the international community to social development and poverty eradication. As such, the debate on whether or not the abundance of natural resources in a country is a “development curse” actually boils down, firstly, to an assessment of the democratic and managerial quality of governance and policy drive in the developing countries, particularly in Africa, and secondly, to a judgment on the effectiveness (meaning fairness to poor producers in developing countries) of the existing multilateral trading system.

Besides the foregoing, the fundamental truth is that, in the long stretch of human history, the very first economic activity was agricultural - for subsistence, self-employment, trade, and technological advancement related to the development of farming and hunting implements. While agriculture and attachment to nature more generally have always been central to the livelihoods and cultures of traditional Africa, as remains the case in most villages, transformation of that natural asset to serve as a steppingstone to manufacturing activities has, in general, been a missing evolutionary opportunity in the continent’s overall development so far. Agricultural production and industrial activities are not mutually exclusive but can and should be mutually reinforcing. Both exist in all countries however developed or high-tech. Which of the two should receive priority treatment and when is a question of policy choice and realism. With their relatively low literacy rates, limited scientific and technological skills and considerably more farming populations, many African countries in their present circumstances can realistically expect to compete better on a global scale in agricultural production than in high-tech manufacturing activities.

It would thus seem logical that African countries should, without forsaking manufacturing activities, concentrate first of all on developing and transforming their natural resource endowment in order to lay a more solid and sustainable foundation for industrial production in the second phase of development emphasis. Beyond Africa, the importance of land and its resources to the development of nations has historically been a universal given. In virtually all developed countries, agricultural production in particular and natural resource activities in general formed the initial foundation for their industrialisation, growth, and wealth creation, as attested by the industrial revolution in Britain in the 19th Century. The colonial scramble for Africa was, basically, an international scramble for natural resources, which were imported by the colonial powers to feed and expand their industrial development and employment in the home countries.

Although times seem to have changed to the point where scientific knowledge and information technology have since dethroned agriculture, and increasingly even the manufacturing sector, as the prime-mover of economic growth and competition, here again the evolution from an agricultural economy to a knowledge-based economy is more apparent than real. For example, notwithstanding its scientific and technological prowess on earth and wizardry in outer space, the United States still “competes” with poor African countries in the production and international trading of agricultural commodities, from pineapple and cotton to maize and meat products.

The word “competes” is in inverted commas because the agricultural sector (and the rural sector in general) in the United States, as in other developed countries, is heavily subsidised by the government in recognition, no doubt, of its strategic and multi-dimensional importance linked to the country’s domestic food security and industrial requirements; international trade in

food and agricultural products; international diplomacy linked to food aid; intellectual property related especially to its trump card in genetically-engineered crops; environmental security and conservation; and domestic electoral politics. The massive support of the developed countries for their domestic agriculture and rural sector is the paradoxical reverse of what prevails in many African countries where governments have very unwisely disengaged from the sector without taking into account the risks to their farmers of unbridled liberalisation and the protectionist wall erected by the developed world around their own farmers.

1.2 Addressing the problem of unstable international commodity prices

Having made the case for developing and transforming natural resources to serve as a motor of economic growth and poverty alleviation, the next question is what to do about ever declining international commodity prices. What would be the economic logic of revitalizing the commodity sector if that would only aggravate the existing glut on the world market and further depress prices? The real problem with international commodity prices can be attributed less to the cruel workings of global market forces (even though there is an element of truth in that) and more to the unravelling of international commodity agreements, more specifically the price-stabilisation arrangements under the International Coffee Organization, and the ACP-EU STABEX scheme, which hardly functioned as originally envisioned.

Box 1

AGRICULTURAL SUBSIDIES IN THE DEVELOPED COUNTRIES

The club of rich nations that wrote the rules of global trade has been aggressive in dismantling barriers when it comes to industrial goods and services, in which they hold a comparative advantage. But they refuse to do the same when it comes to agriculture. Politically powerful farm lobbies in Japan, Europe and the United States are not willing to face global competition on fair terms. So agriculture remains the hypocritical asterisk to our fair-trade and free-enterprise creed.

The idea that our agricultural protectionism harms poor nations is hardly a fanciful one held only by aggrieved third world farmers. Just about any multilateral economic or development agency you can think of has issued reports railing against rich nations' farm subsidies. The World Bank estimates that an end to trade-distorting farm subsidies and tariffs could expand global wealth by as much as half a trillion dollars and lift 150 million people out of poverty by 2015.

Source: The New York Times (The Unkept Promise), December 30, 2003

The wave of economic and market liberalization since the mid-eighties probably contributed to the waning of political support by the developed countries, especially the U.S., for these agreements which sought to stabilise commodity export earnings and shield poor producers against global price swings. Thus Africa's rural farmers bore the full brunt of liberal market orthodoxy even as their much richer counterparts in the developed countries, including in the United States, continued to be heavily protected from the unpredictable effects of unalloyed international market liberalization, as can be seen in box 1.

African countries should develop a political response to this inequity in international agricultural trade. Cooperation is needed at several levels. Firstly, at the intra-African level, political will to cooperate seems indispensable in order to evolve, ideally within the NEPAD context, a strategic regional plan involving producers of those African commodities highly vulnerable to international price swings. For example, in a product sector such as cocoa, where Africa has consistently maintained a 70 per cent dominant share of the world market since the sixties, a regional cocoa strategy would seem desirable to ensure that Africa's global position is not eroded or can be further improved, in quantity and quality.

The first objective could be to develop plant and production technologies that reduce costs by increasing yield relative to labour input and enhancing product quality. The second would aim at expanding pre-export value addition. That would require employing the full breadth of processing technology - by actively encouraging cocoa-based scientific research and development, coupled with domestic and foreign investment and related technology transfers (just as Malaysia has done in its oil palms sector) – so as to make Africa an ultimate global leader in the production and export of cocoa-based finished products (chocolate being only one example), and not simply cocoa beans as in the past 100 years. The finished products would have a large market in Africa itself as well as in other developing countries, besides the traditional importers of the product in the developed world.

The proposed strategy, to be extended to other commodities, might not be easy to implement in view of the global weight of trading companies with big stakes in Africa's commodities. But it should be feasible if backed by the collective political determination of African states to convert their natural resources into industrial growth and to build win-win partnerships with the multinational corporations concerned. In that case, an African cocoa development strategy would be mutually beneficial to the product's stakeholders, starting with the rural producers. Discounting fierce competition by other regions, especially in East Asia, the likely outcome would be that cocoa prices would no longer be dictated solely by market forces in the importing countries as at present but equally by a consortium of African producers backed by an effective regional cocoa development organization with sub-regional arms.

In other product sectors where African countries collectively enjoy no dominant share of the world market, such as coffee, the African Union could use the political framework of the Group of 77 and China to build producer alliances with Asian and Latin American countries, similar to what petroleum producing and exporting countries (OPEC) are doing. At the third level, the Group of 77 and China could exercise the same collective negotiating power they displayed at the 2003 WTO conference in Cancun, Mexico, to foster results-based cooperation between producer and consumer countries including the multinational corporations trading in these commodities. The objective here would be to hammer out more mutually beneficial international commodity agreements that shield poor rural producers in the developing world against unstable prices, just as the developed countries use agricultural subsidies and other measures to protect their own farmers from international competition. That would require aligning the Doha trade negotiating agenda with the imperatives of poverty eradication solemnly pledged by all governments in the United Nations Millennium Declaration . In short, globalisation should be made to produce benefits also for "*the wretched of the earth*".

Box 2**STABILISING WORLD COFFEE PRICES IS GOOD FOR ALL
STAKEHOLDERS**

Support schemes are urgently needed to protect coffee farmers of the developing countries in global markets from wide price fluctuations, such as the very low coffee prices of recent years. The development of mechanisms to stabilise export earnings by providing better access to the IMF's Compensatory Financing Facility or by reviving the European Union's scheme to stabilise export earnings (STABEX) is a high priority. It is an area in which the International Coffee Organization (ICO) can play a leadership role with the international financial organizations, banks and coffee traders. Stabilising export earnings has a number of advantages over buffer stocks and other schemes that directly interfere with commodity supply and prices. Since such schemes are not aimed at keeping prices artificially high, there is less risk of unnecessarily prolonging periods of oversupply. They can, however, help cushion some of the effects of the worst slumps.

Source: Nestlé Coffee Report: Faces of Coffee, March 2004

In sum, therefore, the problem of commodity prices should not be seen as a divine commandment defying human solutions. The central issue of oversupply is amenable to a political solution. When the stakes are so high for poor producers in the developing world, the political option becomes indispensable. In this respect, a cue can be taken from the developed countries' political determination to protect their farmers with tariff and non-tariff measures from the vagaries of the marketplace even as they pursue international trade liberalisation in other sectors. By contrast, African governments seem unable to muster the same degree of political courage to do likewise for their considerably more numerous and impoverished farming populations. If political resolve can finally be exercised by each African government and then crystallized collectively in a NEPAD platform promoted by the African Union, as proposed above, a solution to the problem of commodity prices would surely emerge. All stakeholders – especially producers, traders, and consumers - have an interest in more stable and predictable commodity prices (see box 2).

At a much higher level, more could be done by the United Nations system of organizations – acting ideally as a co-ordinated international advocacy force for the rural poor, and willing in the process to put its credibility on the line in defence of the poor. These are premier international organizations tasked with helping to eradicate poverty in the developing world, in Africa more particularly, and with implementing to that end the United Nations Millennium Development Goals. It is recognised that some organizations are shifting gears to grapple with the affliction of poverty.

One prominent example is the World Bank's Poverty Reduction Strategy Papers (PRSP), which place emphasis on the rural sector, as will be seen later. The International Trade Centre (ITC) is also doing precious work in Africa on commodity marketing strategies. However, as an organizational constellation supposed to have a common programmatic sense of direction,

members of the United Nations system as a group could have been more vocal and pro-active on the question of slumping international commodity prices and their serious consequences in aggravating rural poverty in Africa. How can poverty ever be eradicated on the African continent without an international strategy for raising the current commodity-depressed incomes of rural farmers constituting some 70 per cent of the African population and certainly over 80 per cent of the entire segment of the African population currently below the poverty line, or living on less than one dollar a day?

That question should be central to the pro-poor advocacy programmes of the United Nations system, particularly UNDP, FAO, IFAD and UNCTAD, to name only those more directly concerned. But surprisingly it has been left mostly to non-governmental organizations, especially OXFAM International, to educate the global populace and donor governments on the rigged playing field of international commodity trade. In this context, it is difficult not to form the impression that the international community is knowingly sidelining the issue of rural poverty caused by collapsing commodity prices as a problem too complex to tackle meaningfully. Thus, the proliferation of “poverty eradication” programmes and projects in African countries seem concentrated on “soft targets” - immediate deliverables which are good for scoring points in the media, for polishing corporate image, and for reporting “results” to governing bodies, while the real hardcore problem remains unattended to.

In conclusion, a workable solution to international commodity price swings is possible with the required political resolve of the governments of producer and consumer countries as well as the good faith of commodity trading firms, coupled with the vocal and sustained advocacy of international organizations, especially the United Nations system. Unfortunately, however, for the time being at least, African rural farmers are left to fend for themselves.

1.3 Bridging the interval between the present and future of the commodity sector

The question, then, is what to do with traditional export crops, especially coffee and cocoa, pending resolution of the problem of prices. Should the integrated agricultural development strategy proposed in this study be considered worth trying by any African country, the implementation process may take over five years depending on baseline factors, and probably close to ten years before the benefits thereof begin to accrue to the rural sector. Therefore, the interval between now and the future would need a bridge of interim measures. A realistic and feasible line of action that can produce the immediate relief much needed by rural households would be for African governments to provide direct support to rural farmers in compensation for their loss of income as a result of depressed commodity prices. Such action should be equated to a form of (economic) disaster relief, which it would indeed be for many rural communities. That would correspond to actions normally expected of governments in the event of a disaster (in this case a commodity-price disaster), namely to rush relief supplies to their disaster-stricken population.

Concretely, therefore, each African country affected by falling prices for the commodities most widely produced by rural smallholders, such as cocoa, coffee or cotton, would establish an interim price-support fund (“socio-economic insurance” or safety net) specifically for rural farmers. The proposed fund would then become a central feature of national poverty-eradication

programmes³, hopefully supported by the donor community in pursuance of its commitments to the UN Millennium Development Goals, as stressed earlier in this chapter. In that context of international solidarity to combat poverty, it might not be outlandish for the UN Secretary-General jointly with the President of the World Bank to seek out the views of governments and apex farmer organizations in the developed countries on whether or not they would be willing to cede a small portion of the agricultural subsidies⁴ their farmers now receive annually to support agricultural diversification programmes in Africa. That could be an interesting line of inquiry to pursue.

But since charity begins at home, and pending the advent of a global and more permanent solution to the problem of commodity prices, it would seem logical that national commodity price stabilisation schemes in Africa should precede the stabilisation of commodity prices at the international level. Such a return to the pre-1980 status quo in Africa's commodity sector would be justified on the following grounds. First of all, it is by now self-evident, with the benefit of hindsight, that the sudden withdrawal of many African governments from the commodity sector was a costly error, whose negative impact continues to be felt sorely in the rural sector and on product quality, as witnessed in Cameroon for example. Liberalisation was decreed as a magic bullet for solving all commodity sector problems, without in most cases the guidance of a strategic plan of intermediate, relief, or fall-back measures for the economically vulnerable rural farm households.

The farmers felt sacrificed and dropped without a parachute under structural adjustment programmes, which advocated such liberalisation. Now that the Bretton Woods institutions have mercifully come around to the serious business of poverty eradication, it would seem appropriate and timely to take corrective measures by reverting to the status quo ante. That does not mean governments should resurrect state produce marketing boards. Rather, government and donor support should go directly to rural farmers and/or rural producer organizations such as farmers' cooperatives where they exist. Their institutional capacity to market their produce directly should be strengthened considerably since that area is a recurrent weakness in the performance of many farmers' groups in Africa and in Cameroon in particular.

Secondly, the proposed commodity price-support schemes would level the playing field for farmers in Africa and in the developed countries with respect to agricultural support measures and international trade equity. As WTO negotiations proceed apace, it seems only fair to treat the world's farmers on the same footing, in developed and developing countries alike. Thirdly, while waiting for the stabilisation of international commodity prices to happen, existing coffee and cocoa farms should not be abandoned at the risk of aggravating rural poverty. Furthermore, the crops under consideration still remain the most secure source of income for many rural communities, and they have a ready market, however unfriendly in present times.

The price-support or relief mechanism proposed for rural farmers should focus, on the one hand, on enabling them to improve product quality, which makes a positive difference in market acceptability and earnings and, on the other, on rewarding diversification to alternative sources

³ The proposed fund could also be a central feature of the Heavily Indebted Poor Countries (HIPC) Initiative, or debt-swap scheme in African countries eligible for this programme.

⁴ According to Rick Lazio, the 30 industrial nations of the Organization for Economic Cooperation and Development spent in 2002 \$311 billion on agricultural subsidies, which was more than the combined gross domestic products of all the countries of Sub-Saharan Africa. The World Bank calculated that the European Union's annual subsidy to dairy farmers comes out to \$913 per cow, which dwarfs Sub-Sahara's per capita gross domestic product of \$490, in *The New York Times*, 9 August 2003.

of income, including food crops, fruit and vegetables, if and where these can be evacuated for the local, regional or export markets. However, to do all that successfully would take more than interim measures suggested in this section. The other facilitating factors are discussed in later chapters.

This chapter sought to lay down the broad rationale for revitalising the agricultural sector in Africa despite the misgivings of a part of the international economic research community. But the views of the pessimists are useful in pointing to some risks related to a commodity-centred development strategy. However, those risks can be avoided or mitigated as argued above. The issue of international commodity prices remains fundamental, but here again a solution is attainable if the necessary political determination exists between producer and consumer countries, including trading firms, to negotiate reliable and long-term commodity agreements aligned with the poverty-eradication provisions of the United Nations Millennium Declaration and Development Goals.

In conclusion, far from considering abundance in natural resources, agricultural and mineral, as a “development curse” that discourages industrial and technological advancement, the author takes the opposite view in advocating an integrated focus on the development of the agricultural potential of African countries using Cameroon as a case study of how such a strategy can be developed and implemented to produce results. The rest of the discussion will focus more thoroughly on the Cameroon case, which begins in the following chapter with a comparative analysis of that country’s agricultural potential and performance in the past four decades, viewed in the African and global context.

2. CAMEROON'S AGRICULTURAL POTENTIAL AND PERFORMANCE

«Cameroon, which with its francophone and anglophone mix, is a rarity in the region, is rich in natural resources and has seen growth rates hover at around five per cent for the last five years. That is well above average for Africa, but international financial watchdogs like the International Monetary Fund and the World Bank say the economy could be generating much stronger growth of around 10 percent if its oil, timber, cocoa, coffee, aluminium and rubber industries were better managed. Corruption is the prime drag all over the country from the hot desert plains in the north, to the cool mountains in the centre and the lush tropical rainforest in the south and east»⁵

2.1 Comparative Potential

Although the data in table 1 below may appear rather sketchy in the description of the agricultural potential of a country, the information suffices for the purpose at hand. The five countries in the table started off in the early sixties with more or less similar colonial legacy and economic circumstances in which primary agricultural production was predominant. In the breadth of natural endowment, Cameroon appears to have the more important assets both in total surface area and arable land area, since Ghana's arable landmass of 15.8 per cent amounts only to 62.0 per cent of Cameroon's equivalent. With the exception of Costa Rica, which has been included in order to assess Cameroon's performance against that of a much smaller and less endowed country in a different region, the demographic data for the four other countries exhibit no significant differences.

Further, Cameroon's agro-ecological system, which consists of five zones (humid forest bimodal rainfall area, humid forest monomodal rainfall zone, western high plateau, high guinea savannah, and Sudano-Sahelian zone), is probably more diverse and therefore capable of sustaining a wider range of agricultural activities than the ecological systems of the comparator countries. Indeed, all the crops reviewed in this study can be grown in Cameroon on a scale that could make the country a leading global or African producer of any of the commodities in question. The South West Province of Cameroon in particular is blessed with rich volcanic soils rated as among the best in Africa for crop production. None of the five countries has been prone over the decades to recurrent natural disasters such as massive floods, droughts, hurricanes, earthquakes, or infestations to any extent affecting their national agricultural systems.

Table 1: Key data on agricultural potential

Country	Surface area (km ²)	Land use (arable land) %	Population (million)
Cameroon	475,440	12.8	16
Côte d'Ivoire	322,460	9.3	17
Ghana	239,460	15.8	20
Malaysia	329,750	5.5	23
Costa Rica	51,100	4.4	4

⁵ Integrated Regional Information Network (IRIN) of the United Nations Office for the Coordination of Humanitarian Affairs (UN/OCHA), Africa news release of 12 August 2004

Politically, Cameroon has in general had the benefit of long-term stability as much as Costa Rica and Malaysia. Ghana experienced a series of military coups in the sixties and seventies, which had an adverse impact on its national economic performance, including its agricultural sector. Since independence, Côte d'Ivoire enjoyed political stability and sustained agricultural development for three consecutive decades until political transition problems erupted in the mid 1990s. By the measure of political and social peace, which is of strategic importance for the predictable implementation of long-term development strategies so important in the agricultural sector in particular, Cameroon has, therefore, had an additional comparative advantage over Ghana and Côte d'Ivoire.

With respect to the prolonged slump in the past two decades of the world prices of some agricultural commodities, especially coffee and cocoa, produced by the five countries reviewed, it is somewhat difficult to assess the impact of such a slump on their overall agricultural performance. Because the data set used goes back to 1961, the likelihood is that the five countries were all similarly affected over the decades. However, some countries, particularly Costa Rica and Malaysia, probably used these price fluctuations as an incentive for horizontal and vertical diversification of production in order to forestall the deteriorating terms of trade resulting from commodity price swings. Moreover, the depression of cocoa and coffee prices on the world market did not appear to discourage the phenomenal development of these commodities in South-East Asia for example (especially in Vietnam and Indonesia) in the eighties and nineties. Furthermore, Cameroon has had the extra advantage of being over the past three decades a more important exporter of petroleum products than any of the other comparator countries. Cameroon therefore had the resources to cushion the negative effect of slumping commodity prices and to invest in rural roads, product diversification strategies, and support institutions indispensable to agricultural expansion by smallholders.

Because of its more variegated agro-ecological landscape noted earlier, Cameroon's natural agricultural potential is probably even more applicable to the production of virtually all the food staples most widely consumed in Africa, such as maize, cassava, plantains, yams, cocoyams, tomatoes and onions. To assess the country's relative performance in this respect, comparative data are presented on food production by Cameroon, Côte d'Ivoire, and Ghana since 1961, and additional information is provided on the biggest producers in Africa and elsewhere of the food products in question for the years 1961, 1980, and 2003. The comparisons address the following central question: how well or not has Cameroon exploited its natural assets to compete on the world market (in the production of export commodities) and regional African market (in the production of food crops), and to what extent has it developed a national food security strategy based on its natural agricultural endowments. The answer is to be found in the next section.

2.2 Comparative Performance

2.2.1 Production of export commodities

The data in table 2 on the production of five export commodities (coffee beans, cocoa beans, oil palm fruits, bananas, and pineapples) are self-explanatory regarding the performance of each of the five countries in their output and percentage share of world production from 1961 to 2003, and the presentation of global and regional (African, Asian, and Latin American and Caribbean) production trends during the corresponding period. The evolution of regional

production capacities over the decades may be as interesting as trend data on production by the five countries. The following paragraphs analyse the findings for each of the commodities.

Coffee beans: Although Cameroon managed to increase by 147 per cent in three decades its production of this commodity, from about 45 000 metric tonnes (MT) in 1961 to 111 000 MT in 1990, this output slipped by 30 per cent to 78 000 MT in 2003. With global coffee production increasing by 72 per cent from 1961 to 2003, Cameroon's share of world output increased from 1 per cent in 1961 to a peak of 2.3 per cent in 1980, declining steadily thereafter to 1.8 per cent in 1990, 1.1 per cent in 2000 and 1 per cent in 2003, exactly as in 1961. These figures suggest that the disengagement of government from the commodity sector and its liberalisation since the mid eighties appear to have had a negative impact on coffee production.

Nevertheless, Cameroon's performance was in relative terms superior to Africa-wide coffee production trends. The region's output increased in tonnage only modestly from 1961 to 2003, with its share of world output dropping from 19.2 per cent in 1961 to 12.7 per cent in 2003. Côte d'Ivoire, which in 1961 produced four times more coffee than Cameroon, managed to maintain its share of global production above 4 per cent consistently up to 2000; that share declined to 2.1 in 2003. Ghana and Malaysia are shown in the tables to be comparatively negligible producers of this commodity. Costa Rica, on the other hand, expanded its share of world output from 1.4 per cent in 1961 to 9.4 per cent in 2003.

Just as Africa's coffee production pattern declined relative to world trends during the four decades considered, so did the relative output of countries in Latin America and the Caribbean, whose share of global production dropped by ten percentage points, from 76.2 per cent in 1961 to 60.2 per cent in 2003. The ground lost by these two regions in coffee production was progressively occupied by Indonesia and Vietnam. These two countries, which together produced less coffee than Côte d'Ivoire alone from 1961 to 1970, managed within three decades to grab up to 19 per cent of world output, outpacing all of Africa's performance by six percentage points. In summary, when the percentage shares of world coffee production in 1961, 1970, 1980, 1990, 2000, and 2003, are averaged for each of the five countries studied, the results are as follows in decreasing order: Côte d'Ivoire = 4.3; Costa Rica = 3.7; Cameroon = 1.5; Malaysia = 0.3; and Ghana = 0.04.

Cocoa beans: While Africa as a whole performed better in cocoa production than in the coffee sector by holding fast to its roughly 70 per cent share of the global cocoa market from 1961 to 2003, Cameroon's share during the four decades fell by almost 50 per cent, from 6.3 per cent in 1961 and from a peak of 8.7 per cent in 1970 to 3.6 per cent in 2003. Africa's relatively better performance in this product line was mostly thanks to impressive increases in Côte d'Ivoire's output, from a 1961 tonnage of 80 000 MT, almost equivalent to Cameroon's output the same year, to over one million MT by 2003, compared to Cameroon's 125 000 MT. Côte d'Ivoire improved its share of world output of cocoa beans from 6.9 per cent in 1961 to 38 per cent in 2003, becoming the global leader for this product, for now.

Côte d'Ivoire's performance is the exact opposite of Ghana's. A world leader in cocoa production in the sixties with a global market share of about 35 per cent, Ghana witnessed an inexorable meltdown of its position during the four decades to a mere 10.5 per cent in 2003. Malaysia and Costa Rica are comparatively minor players in the world cocoa sector. The evolution of production patterns in the different regions suggests that the threat to Africa's global dominance of the cocoa market is likely to come from South-East Asia, from Indonesia more particularly. The region increased its share of world production from less than 1 per cent in the

sixties and seventies to 15 per cent in 2003. The share for Latin America and the Caribbean declined from about 28 per cent in the sixties to 14 per cent in 2003. Averaging the percentage shares of each of the five countries in world cocoa production from 1961 to 2003, yields the following results: Côte d'Ivoire = 25.7; Ghana = 19.0; Cameroon = 5.7; Malaysia = 2.6; and Costa Rica = 0.3.

Oil palm fruits: Africa in general performed particularly poorly in this product sector during the four decades considered, tumbling from a commanding world share of 85 per cent in the early sixties to just 11 per cent in 2003. Although each of the three African countries more than doubled its output tonnage of oil palm fruits from 1961 to 2003, they all lost global market share during this period: Cameroon from 3 per cent to 0.8 per cent; Côte d'Ivoire from 1.9 per cent to 1.0 per cent and Ghana from 3.7 per cent to 0.8 per cent. By contrast, South-East Asia, led by Malaysia, completely reversed its production capacity relative to Africa's during the four decades, expanding its share of world production from 11 per cent in 1961 - Africa's current share- to about 83 per cent in 2003 - Africa's share in 1961. The share by Latin America and the Caribbean has remained rather stable over the decades at about 5 per cent on average. The average percentage shares in world production for the five countries from 1961 to 2003 are as follows: Malaysia = 33.8; Ghana = 2.4; Côte d'Ivoire = 2.2; Cameroon = 2.1; and Costa Rica = 0.4.

Bananas: Asia and Latin America and the Caribbean are the dominant players in this sector, accounting between them for close to 90 per cent of the global output in 2003, from 82 per cent in the early sixties. Although Africa increased its total tonnage by 138 per cent from 1961 to 2003, its share of the global volume contracted from 13.6 per cent to 10 per cent during the four decades. Cameroon's share increased from 0.7 per cent in 1961 to 1.6 per cent in 1990, then declined to 1 per cent in 2003. It should be mentioned that, unlike the coffee, cocoa, oil palm, and pineapple sectors in Cameroon, small and medium-size farmers seem excluded from export-oriented production of bananas in the country.

The industry is dominated by extensive plantations owned by a few foreign companies with vertical links to global shipping and distribution networks. This insular strategy with no linkages to the Cameroon farming population currently contributes precious little to the diffusion of production technologies and product-handling know-how within the national agricultural system. By extension, therefore, it contributes next to nothing to poverty alleviation in the country, beyond fiscal revenues. Côte d'Ivoire's performance was constant at about 0.5 per cent of global output, while Ghana's and Malaysia's decreased by about 50 per cent each during the four decades. By contrast, Costa Rica's share grew from less than 2 per cent in the sixties to 3.4 per cent in 2000, dropping to 2.7 per cent in 2003. Average percentage shares of the five countries in global production during the four decades are as follows: Costa Rica = 3.1; Malaysia = 1.1; Cameroon = 1.0; Côte d'Ivoire = 0.5; and Ghana = 0.03.

Pineapples: In this product line as well, Africa saw its share of global production volume shrink from 24 per cent in the sixties to 18 per cent in 2003, while Asian countries increased theirs from 32.5 per cent to 48.6 per cent, and Latin American and the Caribbean countries increased their share from 21 per cent to 30 per cent. Cameroon increased its share from 0.05 per cent in 1961 to 0.5 per cent in 2003, Côte d'Ivoire from 0.8 per cent to 1.5 per cent. Malaysia's share dropped from 4.4 per cent to 1.7 while Costa Rica's expanded from 0.09 per cent to 5 per cent. The average percentage shares of the five countries in global pineapple production during the four decades are as follows: Malaysia = 2.8; Costa Rica = 2.5; Côte d'Ivoire = 1.8; Ghana = 0.34; and Cameroon = 0.25.

By averaging each country's output data for the commodities listed above, a composite performance index can be constructed for the countries studied to show their respective composite shares in the global production of the five export commodities from 1961 to 2003. The results shown in table 3 are self-explanatory regarding Cameroon's relative performance during the period in question, and the degree to which the country used its comparatively more important natural assets to compete for world market share in the agricultural commodity sector. The conclusion to be drawn is that Cameroon under-utilized and even neglected its natural agricultural potential during the period under consideration, since it hardly performed much better than tiny Costa Rica and was outpaced to a considerable extent by the other three comparator countries.

The contrast in performance between Cameroon on the one hand and Malaysia and Côte d'Ivoire on the other may be especially noteworthy in view of Cameroon's more important factor endowment noted earlier, and considering that the three countries were basically at the same starting line in the sixties. A possible explanation for the contrast is that Cameroon, unlike the other countries, did not act quickly enough to remove the colonial legacy of constraints inhibiting agricultural and rural development by investing massively in national physical and institutional infrastructures supportive of the farming population and the agricultural system in general in order to spur output expansion and economic growth, as will be discussed in subsequent chapters.

**Table 2: Export Crop production and share (%) of global output:
1961-2003**

In thousand metric tones (MT)

2.1 Coffee beans

Y E A R	WORLD	Africa		Cameroon		Côte d'Ivoire		Ghana		Costa Rica		Malaysia		Asia		Latin America	
	MT	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%
1961	4527	879	19.2	45	2.0	186	4.1	2	0.04	62	1.4	3	0.07	201	4.4	3448	76.2
1970	3850	1295	33.6	93	2.4	280	7.3	7	0.2	73	1.9	4	0.1	335	8.7	2189	56.9
1980	4837	1161	24.0	112	2.3	250	5.2	2	0.04	106	2.2	10	0.2	633	13.1	2987	61.8
1990	6072	1255	20.7	111	1.8	286	4.7	1	0.02	151	2.5	7	0.1	872	14.4	3883	64.0
2000	7566	1181	15.6	86	1.1	336	4.4	2	0.02	159	2.1	40	0.5	2038	26.9	4261	56.3
2003	7796	980	12.7	78	1.0	160	2.1	1.5	0.02	731	9.4	39	0.5	2042	26.2	4695	60.2

2.2 Cocoa beans

Y E A R	WORLD	Africa		Cameroon		Côte d'Ivoire		Ghana		Costa Rica		Malaysia		Asia		Latin America	
	MT	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%
1961	1182	831	70.2	75	6.4	81	6.9	415	35.1	11	0.9	0.6	0.05	8	0.7	328	27.8
1970	1543	1121	73.0	134	8.7	179	11.6	406	26.3	4	0.2	3	0.2	12	0.8	381	24.7
1980	1666	1026	61.6	117	7.0	417	25.0	277	16.6	5	0.3	35	2.1	54	3.2	553	33.2
1990	2532	1522	60.1	115	4.5	808	32.0	293	11.6	4	0.2	247	9.8	410	16.2	555	22.0
2000	3419	2344	68.6	123	3.6	1396	40.8	437	12.8	1	0.02	70	2.0	553	16.2	470	13.8
2003	3257	2252	69.2	125	3.8	1225	37.6	341	10.5	1	0.02	48	1.5	489	15.0	469	14.4

2.3 Oil Palm fruits

Y E A R	WORLD	Africa		Cameroon		Côte d'Ivoire		Ghana		Costa Rica		Malaysia		Asia		Latin America	
	MT	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%
1961	13670	11550	84.5	413	3.0	261	1.9	500	3.7	22	0.2	55	1.9	1562	11.4	557	4.0
1970	15146	10585	70.0	558	3.7	480	3.2	696	4.6	65	0.4	2155	14.2	3804	25.5	754	5.0
1980	29862	11528	38.6	658	2.2	1083	3.6	914	3.1	157	0.5	12800	42.9	16831	56.4	1262	4.2
1990	60699	12198	20.1	1050	1.7	1078	1.8	850	1.4	333	0.5	31000	51.1	44034	72.5	3709	6.1
2000	120740	15421	12.8	1100	0.9	1771	1.5	1066	0.9	609	0.5	56000	46.4	97088	80.4	6831	5.7
2003	143390	15760	11.0	1200	0.8	1400	1.0	1100	0.8	700	0.5	64000	44.6	118622	82.7	7692	5.4

2.4 Bananas

Y E A R	WORLD	Africa		Cameroon		Côte d'Ivoire		Ghana		Costa Rica		Malaysia		Asia		Latin America	
	MT	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%
1961	21171	2882	13.6	154	0.7	98	0.5	20	0.1	398	1.9	367	1.7	6379	30.1	11059	52.2
1970	31225	3825	12.2	190	0.6	179	0.6	16	0.05	1146	3.7	364	1.2	9632	30.8	16734	53.6
1980	36400	4373	12.0	550	1.5	170	0.5	3	0.01	1107	3.0	445	1.2	14649	40.2	16216	44.5
1990	46234	5887	12.7	719	1.6	146	0.3	4	0.01	1740	3.8	505	1.1	18708	40.5	20337	44.0
2000	66223	6528	9.9	626	0.9	280	0.4	10	0.02	2250	3.4	540	0.8	34719	52.4	23416	35.4
2003	69286	6848	9.9	689	1.0	270	0.4	10	0.02	1863	2.7	500	0.7	37143	53.6	23670	34.2

2.5 Pineapples

Y E A R	WORLD	Africa		Cameroon		Côte d'Ivoire		Ghana		Costa Rica		Malaysia		Asia		Latin America	
	MT	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%
1961	3831	919	24.0	3	0.05	32	0.8	18	0.5	4	0.05	167	4.4	1245	37.2	801	20.9
1970	5447	1270	23.3	6	0.1	124	2.3	30	0.6	5	0.05	308	5.7	2027	37.2	1148	21.1
1980	10831	1688	15.6	34	0.3	294	2.7	7	0.06	10	0.1	185	1.7	6542	60.4	1860	17.2
1990	11555	1936	16.8	35	0.3	233	2.0	11	0.1	424	3.7	213	1.8	5960	51.6	2970	25.7
2000	14376	2550	17.7	43	0.3	226	1.6	60	0.4	903	6.3	249	1.7	7225	50.3	4112	28.6
2003	14616	2663	18.2	76	0.5	225	1.5	60	0.4	725	5.0	255	1.7	7097	48.6	4398	30.1

Table 3: Average share (%) of global output: 1961- 2003

Coffee		Oil palms		Pineapples1.1.	
1. Côte d'Ivoire	4.3	1. Malaysia	33.8	1. Malaysia	2.8
2. Costa Rica	3.7	2. Ghana	2.4	2. Costa Rica	2.6
3. Cameroon	1.8	3. Côte d'Ivoire	2.2	3. Côte d'Ivoire	1.8
4. Malaysia	0.3	4. Cameroon	2.1	4. Ghana	0.34
5. Ghana	0.04	5. Costa Rica	0.4	5. Cameroon	0.26
Cocoa		Bananas			
1. Côte d'Ivoire	25.7	1. Costa Rica	3.1		
2. Ghana	16.0	2. Malaysia	1.1		
3. Cameroon	5.7	3. Cameroon	1.0		
4. Malaysia	3.0	4. Côte d'Ivoire	0.5		
5. Costa Rica	0.3	5. Ghana	0.03		

**Table 4: Export Crops Composite Performance Index
(Coffee, cocoa, oil palm fruits, bananas, and pineapples)**

(1961 – 2003)

Country	%
1. Malaysia	8.2
2. Côte d'Ivoire	6.9
3. Ghana	3.8
4. Cameroon	2.2
5. Costa Rica	2.0

Although Cameroon probably has little or no justification to under-perform on the world market, its case is illustrative of a wider African problem in the under-utilization of natural assets to lift the African population out of poverty precisely because the different elements of the strategy proposed in this study are either absent or unevenly deployed and integrated. During the four decades studied, the continent's share of world output declined by several percentage points in all five commodity sectors and by as much as 73 per cent for oil palm fruits. This dismal performance is generally attributed to widespread conflicts and political instability, which discourage both domestic and foreign investments, especially in agriculture.

However, the problems may be more profound than conflicts, as demonstrates Cameroon's peaceful example. Most African countries still need to direct domestic and external resources, including private investments, to building and maintaining national and intra-regional road networks and transport and communication systems as the sine qua non for sustainable agricultural expansion. Next is the fundamental issue of agricultural science and technology, which in many countries is either neglected or seriously under-funded.

In contrast to Africa's poor performance, some Asian countries gained significant ground in all five product sectors, while Latin America and the Caribbean gained in oil palm and pineapple production, but lost in coffee, cocoa and banana production relative to world output. The much better performance of Asian countries can be attributed not so much to their more numerous head count, important as this factor may be, as to their more advanced physical infrastructures, especially road networks and other transport and communication facilities; their deliberate export-oriented strategies; significant domestic and foreign investments in the agricultural sector – which is not starved for funds as in much of Africa; their investments in agricultural science and technology and widespread diffusion of technological solutions within their farming systems; vibrant linkages between their agricultural and manufacturing sectors; and finally their producer-support institutions and world-class marketing companies. In sum, therefore, most Asian countries have the right combination of the strategic factors essential to stimulating agricultural expansion, as advocated in these pages.

2.2.2 Food production

The commodities reviewed in the previous section are generally destined to the world market to earn foreign exchange for the exporting countries. Food production on the other hand addresses national food security requirements, the need for raw material inputs of a national food-processing industry, and finally local and intra-regional trade in African food products, which increasingly are also being exported to the world market as the African migrant population keeps growing world-wide, especially in Europe. The vast majority of African small and medium-size holders grow both export crops and food crops at the same time, the latter for subsistence and local sale. Thus, farmers' livelihoods and incomes depend on the production of both, implying that the level of food production in a typical African country where farmers constitute the vast majority of the population can define the country's food security and poverty profiles. Furthermore, the same factors that inhibit the production of export crops by rural farmers also constrain, in equal measure, food production beyond subsistence requirements. With a stimulating set of incentives – policy, infrastructures, marketing institutions, and food factories – supporting rural agriculture, farmers would rise above rudimentary subsistence farming to respond to the market and industrial demand for their products. That, in a nutshell, triggers expansion in food production.

The food production data in table 5 below suggest that Africa as a whole did much better in food production than in the export commodity sector in the past several decades, which may be indicative of progressive diversification away from export commodity crops or sole dependence on them. The continent's output relative to global production of the food items studied rose from 1961 to 2003 (in percentage points) for cassava (10), yams (5), cocoyams (15), and tomatoes (4), remained constant for plantains, and decreased only slightly for maize and onions. It is however difficult to ascertain from these figures whether the region's food production trends kept pace with annual population increases. The statistics also provide a sort of index as to where African countries wishing to boost their food production capacities might turn for improved technical know-how in the spirit of technical cooperation among developing countries in the food and agriculture sector.

The same computation methodology used to measure Cameroon's performance in the production of export crops in the preceding section is also used in this section to compare its performance in food production with that of Côte d'Ivoire and Ghana. The comparison in food production is limited to these two African countries since the sampled food products are typically or mostly consumed in Africa, with the major exceptions of maize, cassava, tomatoes or onions. The performance ranking is shown in table 7 below. The conclusion is that Cameroon, which has all the potential to be a bread basket for much of the central African sub-region, also performed very poorly in food production in the past four decades compared to Ghana and Côte d'Ivoire, and most likely to some other less resource abundant African countries.

The data in table 8 on leading global and regional agricultural producers in 1961, 1980, and 2003 further underscore Cameroon's relative dismal performance, since it has over the decades not been a leading global or regional producer of any of the sampled export crops or food crops. One explanation may be that, compared to the other countries studied, Cameroon's relatively more important petroleum exports since the 1970s probably diverted government attention from the country's agricultural potential, and so confirming, in the specific case of Cameroon, the economic research pessimists' argument about "the paradox of impoverishing abundance".

Comparing Cameroon with other African oil-exporting countries like Angola, Algeria, Congo Republic, Gabon, Libya, and Nigeria would seem to lend credence to the above view. With some exceptions, these countries also have by and large tended to neglect their agricultural sector. While that explanation is quite plausible, it is also true that Cameroon's agricultural development strategy until the last decade appeared to be anchored in quasi-governmental big plantations (especially cotton, cocoa, rubber, and oil palms), which together with foreign-owned vast banana plantations failed to link up with small and medium-size holders in the rural sector and to energize them through the diffusion of production and processing technologies and organization of global market access.

Policy seems to have shifted in more recent years in recognising the rural smallholder as the driver of the country's agricultural development. But accompanying measures necessary for such a policy shift to bear fruit are still to materialise, especially when viewed in the context of the South West Province of the country, and particularly the Kupe-Muanenguba Division (KMD) of this Province. The necessary measures in question covered in subsequent chapters.

**Table 5: Food production and share (%) of world output: 1961-2003
(In thousand metric tonnes (MT))**

5.1 Cassava

YEAR	WORLD	Africa		Cameroon		Cote d'Ivoire		Ghana		Asia		Latin America	
	MT	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%
1961	71262	31494	44.2	580	0.8	460	0.6	1050	1.5	18008	25.3	21606	30.2
1970	98590	40537	41.0	654	0.7	540	0.5	1550	1.6	23132	23.5	34735	35.2
1980	124165	48344	39.0	980	0.8	1010	0.8	1857	1.5	45942	37.0	29699	23.9
1990	152282	70189	46.1	1588	1.0	1393	0.9	2717	1.8	49840	32.7	32063	21.0
2000	178664	96745	54.2	1918	1.1	1691	0.9	8107	4.5	50482	28.3	31253	17.5
2003	189100	101916	53.9	2619	1.4	1700	0.9	10000	5.3	55527	29.4	31479	16.6

5.2 Plantains

YEAR	WORLD	Africa		Cameroon		Cote d'Ivoire		Ghana		Asia		Latin America	
	MT	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%
1961	12918	9145	70.8	525	4.1	500	3.9	600	4.6	426	3.3	3337	25.8
1970	20241	14972	74.0	696	3.4	650	3.2	800	4.0	544	2.7	4715	23.3
1980	22564	14727	65.3	1020	4.5	910	4.0	734	3.3	1979	8.8	5849	25.9
1990	26758	19269	72.0	870	3.3	1185	4.4	799	3.0	752	2.8	6720	25.2
2000	30482	21876	71.8	1163	3.8	1418	4.7	1933	6.3	991	3.3	7612	25.0
2003	32974	23309	70.7	1200	3.6	1420	4.3	2300	7.0	1040	3.2	8622	26.1

5.3 Yams

YEAR	WORLD	Africa		Cameroon		Cote d'Ivoire		Ghana		Asia		Latin America	
	MT	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%
1961	8324	7588	91.2	150	1.8	1150	13.8	1100	13.2	89	1.1	476	5.7
1970	17429	16533	94.9	224	1.3	1551	8.9	909	5.2	122	0.7	564	3.2
1980	11639	10520	90.4	200	1.7	2040	17.5	650	5.6	153	1.3	718	6.2
1990	21114	19939	94.4	90	0.4	2528	12.0	877	4.2	224	1.1	682	3.2
2000	38303	36741	95.1	263	0.7	2950	7.7	3362	8.8	227	0.6	1038	2.7
2003	39918	38204	95.9	311	0.8	3000	7.5	3900	9.7	207	0.5	1167	2.9

5.4 Cocoyams (Taro)

YEAR	WORLD	Africa		Cameroon	Cote d'Ivoire		Ghana		Asia		Latin America	
	MT	MT	%	MT	%	MT	%	MT	%	MT	%	MT
1961	4037	2399	59.4	N/A	120	3.0	749	18.6	1385	34.3	19	0.5
1970	5092	3156	62.0	N/A	182	3.6	1136	22.3	1647	32.3	23	0.5
1980	3818	1589	41.6	N/A	230	6.0	643	16.8	1905	49.9	27	0.7
1990	4485	2497	55.7	N/A	282	6.3	815	18.2	1654	36.9	33	0.7
2000	8929	6661	74.6	N/A	370	4.1	1625	18.2	1928	21.6	24	0.3
2003	8939	6577	73.6	N/A	370	4.1	1860	20.8	1977	22.1	26	0.3

5.5 Maize

YEAR	WORLD	Africa		Cameroon	Cote d'Ivoire		Ghana		Asia		Latin America		
	MT	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%
1961	205004	16124	7.9	360	0.2	99	0.05	226	0.1	31601	15.4	24183	11.8
1970	265831	19880	7.5	412	0.2	231	0.09	482	0.2	52963	19.9	38098	4.3
1980	396623	28131	7.1	414	0.1	380	0.1	382	0.1	87453	22.0	45058	1.4
1990	483336	37662	7.8	369	0.08	497	0.1	553	0.1	132482	27.4	49635	0.3
2000	592743	44415	7.5	741	0.1	693	0.1	1013	0.2	147872	25.0	76195	2.9
2003	638043	43522	6.8	1040	0.2	625	0.1	950	0.2	162970	25.5	93724	4.7

5.6 Tomatoes

YEAR	WORLD	Africa		Cameroon		Cote d'Ivoire		Ghana		Asia		Latin America	
	MT	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%
1961	26618	1969	7.4	25	0.09	4	0.02	15	0.06	7604	28.6	1795	6.7
1970	35885	3221	9.0	70	0.2	10	0.03	92	0.3	8426	23.5	3019	8.4
1980	52650	4892	9.3	40	0.08	15	0.03	84	0.2	14598	27.7	5164	9.8
1990	76298	8305	10.9	58	0.08	40	0.05	86	0.1	24686	32.4	7337	9.6
2000	108569	1361	12.5	317	0.3	159	0.22	200	0.2	48945	45.1	9242	8.5
2003	113308	12973	11.4	419	0.4	170	0.2	200	0.2	55221	48.7	9963	8.8

5.7 Onions

YEAR	WORLD	Africa		Cameroon		Cote d'Ivoire		Ghana		Asia		Latin America	
	MT	MT	%	MT	%	MT	%	MT	%	MT	%	MT	%
1961	14200	1210	8.5	-	-	N/A		25	0.2	7400	52.1	790	5.6
1970	16610	1342	8.1	4	0.02	N/A		17	0.1	7810	47.0	1150	6.9
1980	22027	2000	9.1	10	0.05	N/A		22	0.1	10570	48.0	165	8.5
1990	29886	2618	8.8	19	0.06	N/A		38	0.1	15298	51.2	2496	8.4
2000	48300	3802	7.9	67	0.1	N/A		39	0.08	29000	60.0	3360	7.0
2003	52547	4136	7.9	77	0.1	N/A		39	0.07	32445	61.7	3748	7.1

**Table 6: Average Annual Food Production : 1961 – 2003
(In thousand Metric Tonnes (MT))**

Products	Countries	Output (MT)	African Output (%)	Global Output (%)
1. Maize	Ghana	601	1.9	0.14
	Cameroon	556	1.8	0.13
	Côte d'Ivoire	421	1.3	0.10
2. Cassava	Ghana	4214	6.5	2.7
	Cameroon	1390	2.1	1.0
	Côte d'Ivoire	1132	1.7	0.8
3. Plantains	Ghana	1194	6.9	4.7
	Côte d'Ivoire	1104	5.9	4.1
	Cameroon	912	5.3	3.8
4. Yams	Côte d'Ivoire	2203	10.2	9.7
	Ghana	1800	8.3	7.9
	Cameroon	206	1.0	1.0
5. Cocoyams	Ghana	1138	29.8	19.2
	Côte d'Ivoire	259	6.8	4.4
	Cameroon	N/A	N/A	N/A
6. Tomatoes	Cameroon	164	0.3	0.2
	Ghana	113	0.2	0.16
	Côte d'Ivoire	66	0.1	0.09
7. Onions	Ghana	30	1.2	0.1
	Cameroon	30	1.2	0.1
	Côte d'Ivoire	N/A	N/A	N/A

**Table 7: Food Production Performance Index
(Maize, cassava, plantains, yams, cocoyams, tomatoes, onions)
1961-2003**

Country	Composite share of:	
	African production	Global Production
	%	%
Ghana	7.8	5.0
Côte d'Ivoire	4.3	3.2
Cameroon	1.9	1.0

**Table 8: Leading Regional and World Producers
(In thousand metric tonnes (MT))**

Products	Year	World	Africa	Asia	Latin America
Export Crops					
1. Coffee beans	2003	Brazil 1,970	Ethiopia 229	Vietnam 771	Brazil
	1980	Brazil 1,061	Côte d'Ivoire 249	Indonesia 294	Brazil
	1961	Brazil 2,229	Côte d'Ivoire 186	Indonesia 103	Brazil
2. Cocoa beans	2003	Côte d'Ivoire 1,225	Côte d'Ivoire	Indonesia 426	Brazil 171
	1980	Côte d'Ivoire 417	Côte d'Ivoire	Malaysia 35	Brazil 319
	1961	Ghana 415	Ghana	Papua N.G. 9	Brazil 156
3. Oil palm fruits	2003	Malaysia 64,000	Nigeria 8,600	Malaysia	Colombia 2,780
	1980	Malaysia 12,800	Nigeria 5,750	Malaysia	Ecuador 245
	1961	Nigeria 6,750	Nigeria	Indonesia 935	Mexico 253
4. Bananas	2003	India 16,450	Burundi 1,600	India	Brazil 6,518
	1980	Brazil 4,660	Burundi 1,100	India 4,354	Brazil
	1961	Brazil 2,823	Burundi 1,000	Philippines 1,041	Brazil
5. Pineapples	2003	Thailand 1,700	Nigeria 889	Thailand	Brazil 1,400
	1980	Thailand 3,688	Nigeria 600	Thailand	Mexico 623
	1961	USA 778	Nigeria 500	Thailand 450	Brazil 274
Food Crops					
1. Cassava	2003	Nigeria 33,380	Nigeria	Indonesia 18,774	Brazil 22,236
	1980	Brazil 23,400	Congo D.R. 13,000	Thailand 16,540	Brazil
	1961	Brazil 18,058	Congo D.R. 8,680	Indonesia 11,189	Brazil
2. Plantains	2003	Uganda 10,000	Uganda	Sri Lanka 610	Colombia 2,925
	1980	Uganda 5,700	Uganda	Sri Lanka 1,803	Colombia 2,348
	1961	Uganda 3,700	Uganda	Sri Lanka 334	Colombia 1,275
3. Maize	2003	USA 256,000	South Africa 9,700	China 114,175	Brazil 47,809
	1980	USA 169,000	South Africa	China 62,715	Brazil 20,372
	1961	USA 91,388	11,040	China 18,027	Brazil 9,036
4. Yams	2003	Nigeria 27,000	Nigeria	Papua N.G. 280	Brazil 230
	1980	Nigeria 5,248	Nigeria	Papua N.G. 182	Brazil 178
	1961	Nigeria 3,500	Nigeria	Papua N.G. 120	Brazil 85
5. Cocoyams	2003	Nigeria 3,500	Nigeria	China 1,598	Trinidad 5
	1980	China 1,245	Ghana 643	China	Trinidad 8
	1961	Nigeria 1,147	Nigeria	China 722	Tonga 26
6. Tomatoes	2003	China 28,850	Egypt 6,350	China	Brazil 3,641
	1980	Former USSR 6,828	Egypt 2,468	China 5,481	Brazil 1,535
	1961	China 4,826	Egypt 869	China	Mexico 471

Table 9: Four-Decade Development Performance

Country	1961			2003						
	Population (Million) USD	GDP Million USD	GDP Per Capit a USD	Population		GDP (Constant USD)		GDP Per Capita		Populatio n
				Millio n	1961- 2003 increas e (%)	Million USD	1961- 2003 increas e (%)	USD	1961- 2003 increas e (%)	
Cameroon	5.4	653	121	16	196.3	27,000	4,127	1,725	1,326	48.0
Costa Rica	1.4	490	350	4.1	193.0	35,100	7,063	8,561	2,346	20.6
Côte d'Ivoire	3.9	618	158	16.6	326.0	24,500	3,864	1,476	834	37.0
Ghana	7	1,301	186	21	200.0	44,500	3,320	2,120	1,040	31.4
Malaysia	8.4	2,423	288	24.4	190.5	207,000	8,443	8,484	2,846	8.0

Source: compiled from data derived from the UN statistical database

Table 10: GDP Composition in 2003
%

Country	Primary sector	Industry	Services
Cameroon	46.0	21.0	33.0
Costa Rica	9.0	30.0	61.0
Côte d'Ivoire	29.0	22.0	49.0
Ghana	35.2	25.4	39.4
Malaysia	8.4	45.3	46.3

3. POLITICAL AND ADMINISTRATIVE DECENTRALIZATION

Box 3

IT TAKES A VILLAGE TO BUILD A NATION

Michael Njume-Ebong

Commentators on the increasingly popular subject of nation-building generally focus attention on the political and economic fundamentals required to secure the long-term viability of sinking nation states, especially in Africa. However, to the extent that most African village communities are still to be reborn or rebuilt, culturally and economically, exclusive focus on the “nation state” – still an alien and abstract concept in much of Africa – seems doomed to failure.

Rather, priority and resources should go, first of all, to building the atomic elements, that is the village self-governments that collectively should form the indispensable foundation of the modern state in Africa. By switching the focus from “nation-building” to “village-building”, Africa would finally be on the route to regaining its development taproot and self-confidence.

Source: International Herald Tribune (Letters), July 6, 2004

Although African villages existed thousands of years before African cities emerged in their present shape and form during the colonial era, they have not received the priority they deserve in the building of modern African states. The organization of the colonies generally favoured urban population centres as seats of political, administrative and economic power. The pattern of infrastructure provision was by and large similarly urban-oriented to underpin resource extraction and export needs of the European nations. In Cameroon at least this overall development pattern has not changed significantly since independence; the villages have continued to be short-changed to the point where it is not even obvious that the government has statistics on the number of Cameroonian villages and their resident population, unlike the regularly updated statistics for urban centres. While a Ministry exists for urban planning, none has ever existed for the organization and planning of Cameroonian villages, nor for rural development in general, besides the community development service attached to MINAGRI. This chapter probes this problem from the prism of political, administrative and fiscal decentralization.

However, it may not be obvious at first that the issue of effective decentralization to the community level is directly relevant to the subject in hand. But as suggested in box 3, the writer is of the view that the entry point to the development of rural agriculture and nation-building in general lies in the devolution of authority and resources to local government level. Thus, a viable strategy designed to motivate rural farmers to grow themselves out of poverty should start with the decentralization of decision-making authority and means of implementation to the people whose lives and destiny would be affected by such a strategy. This applies in particular to the

existing Cameroon context in which the organisation of government services is tailored to a political pyramidal system.

In the South West Province, for example, most village communities do not appear to have formal self-governing mechanisms with a mandate to defend and promote the villagers' development interests or to deliver services to the local population. Although this subject admittedly embraces a much wider scope, it is particularly relevant to agriculture, which is the predominant economic activity of the rural population, and thanks to which villagers can be financially self-reliant in fulfilling their basket of needs, especially education, health, housing and public utilities where they exist. Accordingly, discussion of rural and community development inescapably implies the development of rural agriculture. The rest of this chapter looks at decentralization as a strategy for empowering village communities – that is farming households essentially - to be better organised in articulating their development needs, and participating in the formulation of decisions affecting them and in the delivery of services directed to them.

3.1 Some National development indicators resulting from the existing centralized system of government

Farmers' capacity to produce and enhance agricultural performance is conditioned by the availability of the public goods and services government should normally provide to the population. It is a truism that local government or comparable decentralized local delivery system is the most appropriate instrument for satisfying local development needs, such as basic rural infrastructures, particularly access roads, drinking water and sanitation, produce warehouses, healthcare centres or basic education. The extent to which those needs have been met so far in Cameroon's local communities is evident in the country's social development indicators, which are also a quantitative measure of national distribution of resources and of how well government is functioning for society and in particular for the rural poor. The indicators show, for example, that while rural communities account for just less than 60 per cent of the national population, these communities represent about 87 per cent of the entire population afflicted by poverty. This staggering estimate was confirmed during the national 2000 PRSP process in Cameroon, which concluded that poverty in the country was essentially a rural phenomenon.

Social indicators also estimate that Cameroon has 7 physicians for every 100,000 people, compared to an Africa-wide average of 37 physicians; and 36 nurses per 100,000 people, compared to 106 nurses on average for all African countries. Hospitals and other healthcare services are inordinately concentrated in the urban areas. While about 60 per cent of the country's population is estimated to have access to safe drinking water and sanitation, the figure for the rural areas is deemed to hover around 40 per cent at best, with upwards of 500 people served by one water point, which is about double UN norms.

National primary school enrolment is estimated at 90 per cent, but this figure slips to 60 per cent in the rural areas, not taking into account the much lower quality of educational facilities in these areas, where the adult literacy rate is also much lower than the national figure of over 70 per cent. The educational level of farmers is essential to their ability to absorb training in production strategies, including especially their understanding and application of novel technological solutions. About half of the national road network of 50,000 km is estimated to serve the rural areas. In reality, however, availability of rural roads on maps is not the same as

usability of these roads since they are so poorly maintained in much of the South West Province for example that they are more of a public danger than a public good, particularly during the rainy seasons.

3.2 Profile of a marginalized rural community in Cameroon: Kupe-Muanenguba Division (KMD)

This Division of the South West Province, with an estimated population of about 200 000 inhabitants in 2004, is typical of a Cameroonian rural community in its severe combination of the negative development indicators summarised above in respect of the rural areas. Virtually all the population depends for a living on agriculture, with family households constituting the main farm labour force. If the proportion of the national population living in the rural sector is estimated to be just less than 60 per cent, it is well over 90 per cent in KMD, with Tombel being probably the only agglomeration that can qualify as a “rural township” having some public services combining with commercial activities.

The Divisional headquarters in Bangem is itself still predominantly rural in character. Primary and secondary schools exist as well as hospitals in Bangem, Tombel, Nyasoso, and Nguti, but they are sparsely staffed, poorly supplied, and hardly maintained for lack of resources and trained personnel. A single “feeder road” passes through the entire Division, from Tombel to Bangem, but it is difficult to navigate in general, and particularly hazardous during the rainy seasons, so much so that the entire KMD can be considered landlocked for agricultural development and produce evacuation purposes. This has been the most serious difficulty confronting the Chede project in Muambong, located between Bangem and Tombel.

A new feeder road linking Bangem to Nguti is under construction, but it is too early to tell what its impact on the Division’s agricultural development prospects will be. Current estimates are that, when completed, the new road will be accessible to less than 25 per cent of the Division’s farming community, which lives in small villages widely dispersed on a hilly topography. Only Bangem, Muambong, Nyasoso, Nguti and Tombel have electricity and postal services in some cases. The entire Division is not covered by a telecommunication network and therefore no Internet connectivity is possible at present. Accommodation is scarce and less than convenient for government personnel and private visitors.

The above limitations have proved to be a major obstacle to the development of the full agricultural potential of KMD since Cameroon’s independence in 1960. Although the region’s volcanic soils are ideal for a wide range of agricultural activities, currently only coffee and cocoa are grown in virtually all villages, making KMD one’s of the biggest producers of these two commodities. The reason for this choice is simple: the two crops are not perishable and can be evacuated by merchants, albeit with much difficulty, during the dry season which thankfully coincides with the harvest season for the two commodities.

Food crops are equally grown for subsistence and income if and when they can be evacuated to market, but this option is limited by serious transportation problems and low local prices. Because of their perishable nature, lack of cooling houses or other appropriate storage facilities, and evacuation and marketing difficulties, post harvest losses for marketable food crops are considerably higher than for coffee and cocoa, implying therefore that these two products continue to represent for most KMD families their most reliable source of disposable income. Therefore, diversification to fruit and vegetable production to boost incomes and insure against coffee and cocoa price swings remains at present virtually impossible for KMD farmers.

The entire Division does not have an inch of tarred road. Because of its deplorable state of transport infrastructure, dearth of public services and harsh rural landscape, KMD is among the least attractive duty stations in Cameroon, be it for government or private-sector personnel. There is no major public or private investment creating employment in the Division comparable to plantations in Fako, Meme, or Ndian Divisions for example. Chede Cooperative's demonstration farms in Muambong, though an entirely self-financed medium size agricultural operation, currently represent the most important economic investment creating jobs in the entire Division. Due to its difficult living conditions, public services are very sparsely and unevenly represented. Experienced engineers, technicians, teachers and health personnel with an option to reside elsewhere in the country do not choose to live in KMD, and so there are very few of them to be found in the Division.

Although MINAGRI seems to have the most troops on the ground, with staff right down to village community level (Agricultural Chiefs of Post for example), most of its agricultural extension staff assigned to the Division do not actually reside there. Some have their homes in other, more urbanized Divisions of the Province, and report to headquarters in Bangem only sporadically, usually to be counted in a census of civil servants. For these reasons, there is not much interaction to talk of between extension staff and the local farmers. Technical staff from the Provincial capital in Buea and from MINAGRI itself in Yaoundé, when they show up at all, hardly engage in more than a few hours of perfunctory dialogue with community leaders and the farmers because they would not stay overnight for lack of essential amenities and communication facilities. High-level official visits from Yaoundé to the South West Province generally bypass KMD for the same reasons, especially its hazardous roads.

In the present circumstances, the Divisional headquarters is not really operational and does not seem to have a Divisional development blueprint of its own. It lacks both the authority and the means to provide any basic services likely to improve the lot of the poor within its jurisdiction. KMD can therefore be seen as an archetypical example of the adverse consequences in the rural sector of the current vertical organization of government and lopsided national resource distribution pattern, which marginalizes the rural population supposed to spearhead the country's agricultural expansion. Accordingly, there will be no such expansion until the negative conditions described above are relieved.

3.3 Constitutional provisions on decentralization

As stated in Article one, paragraph (2) of its Constitution of 18 January 1996, Cameroon is supposed to be a "decentralized unitary State". The Constitution provides in Article 55 for "Regional and Local Authorities" which shall be "public law corporate bodies" responsible for promoting economic, social, health, educational, cultural and sports development in their geographical jurisdictions. When the Constitutional provisions on decentralisation become operational at long last, the existing ten Provinces are expected to become Regions (administered by elected regional councils) and the districts (communes) will have local authorities (administered by elected local councils). It is further stipulated that the law shall define: (a) the sharing of powers between the State and the Regions; (b) the resources of the Regions; (c) the land and property of each Region. It is finally envisaged that "the organization, functioning, and financial regulations of regional and local authorities shall be defined by law". A Presidential Secretariat on Administrative Reform (SPRA by its French acronym) is apparently working on a comprehensive framework to govern implementation of these decentralization measures.

After decentralization is ultimately phased in, it should then be possible to ascertain from the practical outcomes whether or not the pendulum has indeed swung from the present “unitary” State towards a “decentralized” State. Nevertheless, the promised devolution of authority to the regional and local level, however limited, would still represent a long-awaited improvement over the centripetal strategy of the previous Constitution of 2 June 1972, which has not yet been superseded and therefore still applies to the existing organization of government services in the country. For the new Constitutional system of decentralization to work out in practice as the nation’s foremost development empowering tool, particularly in the peripheral zones, the framers of the implementation statute and Parliament, which must adopt the statute, would need to take stock of the negative impact that the present centralized machinery of State has had on rural development in general and rural agriculture in particular.

Notwithstanding Law 74/23 of 5 December 1974 establishing communes, the reality in the South West Province for example is that there is at present hardly any autonomous local self-government in the rural areas, characterised by a visibly functioning elected representative body, legally-defined responsibilities and functions, autonomous working and investment budget and revenue sources, or staff and financial regulations of its own. Some of the communes which have been more or less operational in other Provinces, especially the urban municipalities, have to date been essentially State-administered or highly dependent on the State for their survival. Thus, although “local elections” do take place, the communes (or districts in the South West Province), while existing on paper, don’t have recognizable development responsibilities and functions independent of central government representation in most rural areas, and certainly not in KMD. This shortcoming couples with the lack of sustained interaction noted earlier between farmers and extension services to exclude practically the rural population from the generation and implementation of projects supposed to benefit them.

This disconnect (meaning social communication and accountability gulf) between project planners and project beneficiaries may explain why development initiatives geared to rural agriculture have so far had a consistently high rate of failure, and why predominantly agrarian areas like KMD have remained frozen in a development time warp since independence. That may also explain the findings of the previous chapter showing that, despite its comparatively more important natural resources, especially its agricultural potential, Cameroon nonetheless performed less than Côte d’Ivoire and Ghana in agricultural output in the past four decades, and considerably less than Costa Rica and Malaysia in overall development indicators, all resulting in Cameroon having the worst poverty profile of the five countries after a forty-year development record. This comparative scorecard additionally suggests that Cameroon’s three-decade-old oil wealth did not contribute its share to the development of the country’s social and physical infrastructures.

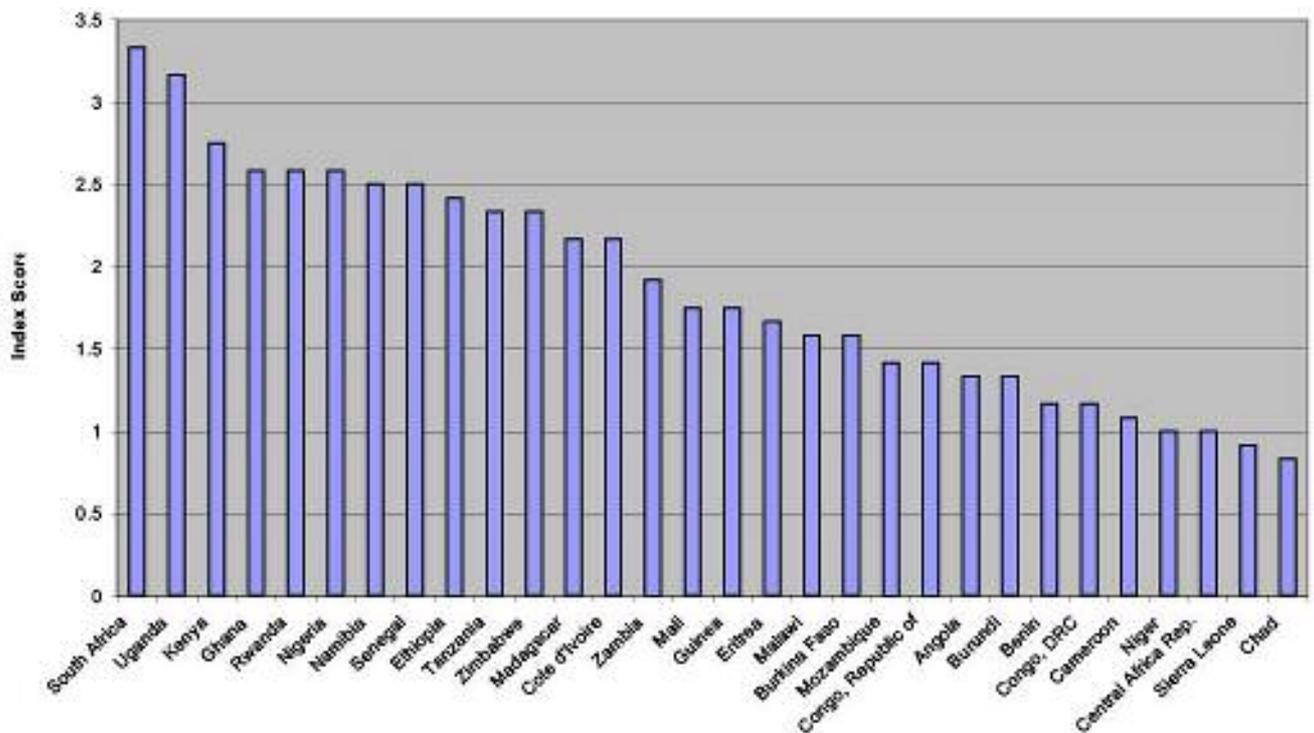
3.4 Degree of decentralization in other African countries

How does Cameroon’s present governance system compare with that of other African countries? The answer is provided in a 2003 World Bank publication entitled *Decentralization in Africa: Emerging Trends and Progress*⁶, which assessed the degree of decentralization in thirty African countries, including Cameroon, in their political, administrative and fiscal arrangements. Each country’s political decentralization was assessed on the basis of (a) the number of elected

⁶ Findings: Public Sector Reform and Capacity Building, No. 229, August 2003.

sub-national tiers; (b) the holding of direct elections for local government; and (c) the turnout and fairness of such elections. Administrative decentralization was measured on the basis of (a) the clarity in the legal demarcation of roles between the central government and local government; (b) which level of government (national or local) had responsibility for service delivery at local level; and (c) where responsibility resided for hiring and firing civil servants working at local level. Fiscal decentralization was measured on the basis of (a) clear and predictable formula for fiscal transfers from the central to the local government; and (b) the proportion of public expenditures controlled by local governments.

Figure 1: Relative Decentralization in Africa



Source: World Bank

As can be seen in the figure above depicting the overall decentralization ranking, Cameroon scored very poorly indeed, coming in 26th position out of the 30 countries studied. A flashback to the previous chapter on comparative agricultural performance shows that the two African countries (Ghana and Côte d'Ivoire), which did much better than Cameroon in the production of export commodities and food crops in the past four decades, also happen to be considerably more decentralized than Cameroon - politically, administratively and fiscally - with Ghana being in 4th position and Côte d'Ivoire in 13th. The strategic correlation between the degree of decentralization to the local level and agricultural performance is far from fortuitous since agriculture is essentially a rural activity where the system of incentives motivating the farmers to higher levels of achievement can make a huge difference in output and productivity. A similar correlation will be seen in the next chapter between national road network density and agricultural production.

It is not surprising that South Africa tops the decentralization ranking. Its post-Apartheid 1994 Constitution is considered a democratic model in Africa, including its explicit apportionment of service-delivery responsibilities between the central government, provincial governments, and local governments, all of which is spelled out in the Constitution itself, not in a subsidiary statute. More fundamentally, and unlike the Cameroon Constitution, South Africa's Constitution assumes that all levels of government (central, provincial, and local) and all officials at whatever level equally and evenly share patriotic responsibility for the welfare, good governance and economic progress of the country. From this pivotal democratic principle flows the formula of equitable sharing of the country's resources between the three tiers of government.

Thus, Article XXVI of the Constitution states that *each level of government shall have a constitutional right to an equitable share of revenue collected nationally so as to ensure that provinces and local governments are able to provide basic services and execute the functions allocated to them.* Article XXVII stipulates that *a Financial and Fiscal Commission, in which each province shall be represented, shall recommend equitable allocations to the provincial and local governments from revenue collected nationally, after taking into account the national interest, economic disparities between the provinces as well as the population and development needs, administrative responsibilities and other legitimate interests of each province.* Those who know South Africa pretty well will confirm the extent to which this genuinely democratic system of governance embedded in its Constitution since 1994 has positively impacted on the country's development within the past ten years, particularly at local level, in terms of basic public goods and services such as road infrastructure, utilities, housing, or agriculture-support institutions and services designed to mitigate the wide disparities in income and development opportunities inherited from the Apartheid era

3.5 From excessive centralization of government to a crisis in public service ethics

If the same public good and services are not yet accessible to most Cameroonian rural communities, it is mostly because the Constitutional arrangements and public administration have been skewed disproportionately towards the summit of the State in terms of political power, operational authority, and distribution of national revenues. In its practical manifestations and effects, the present system of government is geared more towards political and administrative control of citizens than towards promoting their social and economic welfare, and more towards serving Cameroon as a political construct than serving the Cameroonian population.

Not surprisingly, rural development projects (like most other projects) have tended to be administered directly from the State capital in Yaoundé through Provincial and Divisional Delegations, which then co-operate or not with Sub-Divisional delegations (where these exist in reality and not only on paper) to implement activities directly in and on behalf of the village communities. In other words, four different echelons (Yaoundé, Province, Division, and Sub-Division) of administrative and financial intermediation may be involved in a typical project implementation scenario in the rural sector. Although this scenario may vary depending on the type and scope of the project in question, in virtually all cases the village or beneficiary communities directly concerned tend to be locked out of the project's needs assessment, design and implementation processes.

Hardly anyone in Cameroon ignores the requirement to “motivate” approval signatures, disbursements, or priority treatment at each level of government bureaucracy, from different Ministries in the capital right down the chain. The present centralized system is equally costly in its exorbitant demand on project resources at the four different levels of administrative hierarchy mentioned above. For example, a typically important project budget line is that for project staff vehicles, usually expensive four-wheel drive vehicles, and operating expenses needed at each of those levels. In the context of devolution of authority and resources to the local level of beneficiaries, such costs would be compressed considerably for a project implemented entirely at this level and resources thus released could be allocated, for example, to building rural infrastructures and reinforcing the operational capacities of farmers’ organizations.

In sum, therefore, government support for rural development in the past decades can be compared to a water-borne pipe extending from Yaoundé to a village community but leaking its contents along the way at each level of the vertical system of public administration, with hardly anything left for the intended village beneficiaries. The Prime Minister’s good governance initiative is yet to grapple with this ethical crisis afflicting the country’s public service delivery system. Without corrective measures, the same self-serving venality could equally cripple the proposed system of decentralization.

3.6 Evolving government initiatives

Besides the constitutional provisions on decentralization discussed earlier, the government has developed in the past few years two useful initiatives addressed to the rural sector and also bearing on the mechanisms for the delivery of services to the rural population. The first such initiative is “**The Integrated Rural Development Strategy**” (IRDS), jointly established by MINAGRI, MINEPIA, and MINEF. This strategy is judiciously focused on the needs of rural communities, with emphasis on rural infrastructure development such as produce warehouses, feeder roads, electricity, safe drinking water and sanitation systems, etc, all of which would, if realised, link village communities to the national economic mainstream. More specifically, the strategy has the following four sub-programmes:

1. Modernization of production facilities which seeks, among other things, to improve access by farmers to production facilities, inputs, new technologies through strengthened linkages between agricultural research and extension services, promote and support the development of private-sector entities, NGOs and rural community organizations so that they can provide producer-support services in the rural sector;
2. Restructured institutional framework, which aims to build up organizational and technical capacity in the rural sector so as to improve the quality of public service delivery and to respond more specifically to the needs of the rural poor;
3. Enhanced incentives which should enable the government to work with the private sector in developing more effective market mechanisms and food-processing opportunities in support of rural farmers within the context of pro-active government policies; and
4. Sustainable natural resource management which seeks to promote community and private initiatives that protect the environment, such as renewable natural resources;

safeguarding production potential especially soil fertility, water resources and biodiversity; and effective community management of rural infrastructure.

The second initiative aimed at the rural poor is “**The National Participatory Development Programme**” (NPDP), which is designed to support progressive decentralization of government services and involve the beneficiary populations much more than hitherto in development activities addressed to them. The main stakeholders of this fifteen-year initiative are community organizations, grassroots NGOs, and local governments when they come into being. One of the programme’s most important elements is the Rural Community Development Support Fund which will co-finance village-level micro-projects developed by beneficiary communities themselves.

The two initiatives (IRDS and NPDP), which are complemented by similarly-targeted AfDB-supported projects in the North West and South West Provinces, are commendable since by their objectives they serve candid evidence of the fact that the rural population has by and large been left on the margins of the country’s socio-economic development so far. That has been due to excessive government centralization, lack of a tradition of accountability and managerial probity of public officials in charge of development programmes, as well as inadequate rural-urban communication infrastructure, as will be seen in the next chapter. In fact, IRDS and NPDP may not even be considered innovative at all in the context of government’s past rural development strategies and programmes dating back to the 1960s. As will be seen below, the World Bank, IFAD and AfDB, among other donors, already have a long record of financing agricultural and rural development projects in Cameroon with more or less the same policy thrust as the two initiatives outlined above.

The projects in question can be likened to well-meaning Sisyphean attempts to surmount a centripetal government system in order to deliver services to rural farmers. But each attempt has crashed against the formidable obstacle of over-centralization, with government officials in Yaoundé unwilling for obvious reasons to relinquish or dilute their power of control over project resources, disbursement authority, and local delivery decisions. Not surprisingly, the impact of the donor-supported projects has generally been weak and uneven. The integrated rural development project supported by AfDB in the South West Province from 1988 to 2002 was only partially implemented (less than 40 per cent delivery), leaving hardly a trace of impact on the rural infrastructure it was intended, among other objectives, to improve in the Province. This outcome was due to the various problems discussed herein, including long delays in custom clearance of project equipment and erratic disbursement of funds.

Unless the centre (starting with the Presidency of the Republic) yields full control to the local level for the financing and administration of rural development projects, which is not a foregone conclusion even after the creation of rural local authorities, it is very unlikely that the rural poor will benefit more from these latest, well-targeted initiatives than they did from equally well-targeted ones in the long history of rural sector development in Cameroon. In fact, government officials have never lacked the skills for drawing up brilliant pro-poor programmes; what has been lacking historically are the right structural framework and management accountability system for implementing such programmes.

3.7 Evolving World Bank strategy in Cameroon

The international donor community, which must work with and through government machinery, is not unaware of the above-mentioned challenges. The World Bank in particular

deserves much credit for taking careful stock of the performance and results of some agricultural development projects it has financed in Cameroon within the past decade together with other external partners mentioned above and then coming up with a Country Assistance Strategy (CAS) for Cameroon, which includes features focusing squarely on the needs of village communities, very much along the lines of NPDP, itself partly a brainchild of the Bank. As observed in one of the Bank's reports⁷, its previous "*projects have had only limited impact on improving growth in the agricultural sector and production and productivity of Cameroon's rural poor.*"

The PRSP process in Cameroon in 2000, which was based on extensive and in some cases hitherto unknown consultations with poor urban and rural segments of the population, was remarkable not only because of its fully participatory approach involving government, private sector, local non-governmental organizations, rural community representatives, and donor community, in the identification of the main causes of poverty in the country, but even more importantly because of the candid views expressed during the process. Among the major concerns voiced by the poor were widespread "corruption" in the public service, absence of decentralization, and inequitable distribution of national resources.

Accordingly, the World Bank's new strategy in Cameroon is oriented to addressing the rural institutional void or weaknesses resulting from the country's highly centralized administrative system and lack of effective local self-governing mechanisms. Thus, the Bank is increasingly concerned to ensure that its supported agricultural and rural development projects are designed and developed starting from the bottom of beneficiary village communities by involving them directly in the identification of their priority needs, strengthening their organizational and operational capacities to provide services for themselves, and assisting the Cameroon government in the implementation of a decentralized mechanism for channelling funds directly to rural communities.

That is the right strategic direction for motivating rural smallholders in the current Cameroon context. But would that by itself guarantee ultimate success? Not very likely since the Bank's new approach and new generation of projects directed to tackling poverty will still have to be implemented and reported on by and through the same public services with a long track record of failures in project execution. The first priority probably would have been to advocate, for example in the context of the Prime Minister's good governance programme, sanitization of public delivery mechanisms, at least pending the institution of the new system of decentralization in the country. However, it is not yet clear how much relief decentralization will bring to the rural population since the law adopted in July 2004 on the subject suggests that the centre is not actually ceding control and that it will continue to cast its shadow over the functioning of regional and communal councils.

The Bank is circumventing (not solving) the problem of service delivery in the rural sector by promoting an expanded role for rural-based private-sector and civil society organizations both as beneficiaries of capacity-building project elements and as proxy executing agencies. But that also would not suffice in the land-locked rural communities, which at present are more numerous in Cameroon than the easily accessible ones. If farmers are motivated to produce more without efficient all-season produce evacuation possibilities, any such investment in increased production would be a non-starter. If the necessary resources cannot be mobilized for a massive road building programme in the rural sector as a key pre-condition for phasing in agricultural projects

⁷ Appraisal report on *Cameroon Agricultural Research and Extension Program Support Project*, June 1998.

addressing the rural poor, then the Bank's strategy should be implemented initially only for the benefit of communities with reliable market access roads. But even for those rare and lucky communities, the problem would still not be totally solved since farmers in general and rural farmers in particular are not produce marketing experts. It is successful marketing that pulls production, not vice-versa.

Therefore, the local, regional and export marketing component – comprising private-sector marketing institutions and produce merchants with access to credit and market information and operating in an efficient business environment - is an equally indispensable incentive for farmers to produce more and better, and thereby earn ever higher incomes from agriculture. That last component is still extremely weak at present in Cameroon, as will be seen in chapter 7. What all that boils down to is the need for a holistic integrated programme approach to raising rural agricultural output, which is the strategy pursued in this study. Investing resources in one or two stand-alone sectors, such as the Bank's just completed "National Agricultural Extension and Research Program Support Project", will not begin to solve the problem until the other mutually re-enforcing components are firmly in place, that is political and administrative decentralization anchored in a representative local government accountable primarily to its rural electorate (as opposed to transient village-based institutions whose existence and vitality would be coterminous with the duration of whichever project created and supported them), all-season farm-to-market roads; enhanced application of agricultural science and technology; and producer-support credit and marketing institutions.

3.8 Decentralization and traditional governance systems

An effective system of decentralization in Cameroon would need to address the void of effective representative authority at the grassroots noted earlier. This problem appears to have been aggravated over the years by the apparent progressive loss of the authority and legitimacy of traditional self-governments such as the chieftaincy institution. Even though the situation differs from one Province and Division to another, the fact is that the 1977 Presidential Decree defining the powers and functions of the country's traditional chiefs all but clipped their independence of action in defending and promoting the interests of their respective constituencies.

By placing the traditional chiefs on government payroll and assigning to them specific functions, such as transmitting government directives to their communities and ensuring implementation of same; keeping law and order and collecting taxes on behalf of the State; performing any other functions as may be directed by government, the law in question had the effect of transforming the traditional chiefs into State agents within their respective communities, leading to the demise of independent and credible native self-government and its socio-cultural relevance to the building of the Cameroon nation. Although traditional chiefs exist and can still mobilise community labour and perform ceremonial functions, they can no longer check and balance government policies and actions affecting their people. Their sacredly galvanizing authority of yesteryears as community leaders has been emasculated beyond recognition. In much of KMD for instance the chieftaincy institution has degenerated since independence to the point where it is no more than an empty title – to be inherited or grabbed.

Yet, Cameroon's constitution, though not mentioning the word "village" a single time, stipulates that the State "*shall recognize and protect traditional values that conform to democratic principles, human rights and the law.*" The constitution additionally envisages

representation of traditional chiefs on the regional councils. Although similar representation on the local councils is not specifically mentioned, the latter organs could be expected to rule on the matter when decentralization is finally implemented. It is also not clear from the Constitution whether the chiefs will henceforth cease to be representatives of central government to become agents of regional or local government or whether they would finally recover their independence vis-à-vis the state system so that they can rebuild autonomous village self-governing institutions, serve and represent their communities within the constitutional framework.

In other words, so long as indigenous institutions of self-rule can be modernized in keeping with democratic and human rights principles, they can serve as legitimate micro-level extensions of a national decentralization strategy dedicated to social and economic development in the villages. The merits of such an approach are discussed below bearing in mind the relevance of this issue to rural agriculture since the village communities under consideration are in fact farming communities whose disciplined organization, psychologically motivating cultural self-esteem, and participatory role in the upcoming decentralized system of government can certainly be expected to have a positive impact on agricultural production at national level.

3.9 Linking indigenous institutions to the state-building process

Traditional village institutions and customs are probably still the most important preserve of African culture in its original and concrete diversity. Alarming, however, many African villages and their institutions are becoming a threatened species under the weight of economic misery and official neglect in the rush to build the architecture of the modern nation state. It is, for example, something of a cultural paradox that anyone wishing to enjoy a colourful agricultural harvest festival should rather visit a Swiss village community for example, and not African villages, which most likely pioneered such a tradition in the first place in the long history of humankind. Village communities represent Africa's societal base which should be re-energized to sustain the modern nation states if these are to have any substantive African content and relevance to the majority population. A typical village can offer a few precious lessons to the political establishment of the African modern state.

For example, transparency governs social and economic relations to the point where virtually at any time each villager knows what the other is doing. In this climate it is almost impossible to embezzle community funds without popular knowledge – and instant retribution. The same degree of transparency could apply to the workings of the modern state apparatus. Villagers are not likely to operate private accounts abroad to which they might illicitly siphon off development funds⁸. Further, the operation of traditional loans and savings societies exhibit a high standard of fiduciary responsibility not yet matched by government bureaucracy and the modern banking sector. Monitoring, evaluation and accountability functions for projects implemented within or by the community are collectively and continuously performed by the villagers who witness progress and constraints concretely online. Progress and evaluation reports become unnecessary since by the completion of the project the community will have passed

⁸ Addressing the AfDB's annual meeting on 23 May 2004, Mr Henry Flint of Standard Bank of South Africa observed that "40 per cent of Africa's private wealth leaves the continent which erodes domestic investment and sends a message to potential investors that Africans have no faith in Africa". Those responsible for such transfers abroad are not villagers but the politicians, civil servants and business class who drain Africa's resources in other ways, such as shopping abroad, medical treatments abroad, educating their children abroad, and vacating abroad, while the patriotic villagers always remain at roost.

judgement on performance. And the project will be terminated by the community's dance of thanks, not the project manager's final report written in a hotel far away from project site.

Moreover, village life is characterised by a high degree of economic solidarity to the point of mutual sharing of deprivation; this basic principle could equally find application in national government in terms of equitable distribution of state revenues and care for vulnerable population segments. Consistent with the villager's synthetic mode of thought and action, inter-sectoral coordination and integration of development inputs ideally take place within village communities where in actual development praxis all sectors become one in terms of their deep inter-dependence on agriculture. A farmer who is not healthy cannot produce, and one not literate enough will not farm as smartly as the more educated one. More time spent searching for water from distant sources means less time devoted to farming, while rural electrification and other modern amenities reduce the itch for city life, thereby preserving the youthful strength of farming households.

Such sectoral complementarities in the rural setting require intra-governmental integration and synchronisation of development actions directed at this sector, which is rarely the case, resulting in much wasteful overlap. In conclusion, village communities own culturally and socially (not only economically) the projects they implement or implemented with their emotional participation since such projects are informed by indigenous values and integrated outlook; the projects evolve in the empirical, participatory context of the end-users, and have an extremely low overhead cost, with gratifyingly little or no paperwork, all upper levels of intermediation having been cut out. These are only few examples of how the African cultural base should sustain national development efforts through osmotic processes.

Thus, marginalizing African villages amounts to denigrating the role of indigenous systems of rationality in the nation-building process. Because that has too often been the case, "*a disturbing dualism verging on polarization can be observed in many countries as the modernization process and indigenous value systems evolve along parallel tracks, such as in formal and informal economies; modern banking sector and traditional credit and loan societies; supermarket stores and African market places; official (European) languages and local languages; modern justice system and customary law practice; district officers and traditional chiefs; modern physicians and traditional healers; etc. While the indigenous institutions are vibrant and gaining ground in many countries, the institutions born of modernization (as now induced) appear to be running aground, as if incapable of internal regeneration*"⁹. To that may be added the extremes between a highly practical, paperless village environment and national administration which reveres paperwork almost as a religious ritual. A village-oriented development approach would rather emphasize information and communication technology tools, which correspond better to the horizontal, transparent, and practical texture of village life than paper-pushing which makes a virtue of elitism – completely alien to villagers.

What then is being "developed" in the modernization process if not the indigenous institutions, which now compete from below with "modernism" force-fed from the top for lebensraum and the future of the state system itself? The task of the moment, then, is to address this "disturbing dualism" of two separate African worlds and societal systems that must be merged into a coherent development process, using both the old and the new as indispensable building tools. Finding a solution to this challenge will tax African intellectuals and politicians,

⁹ "Evaluation of the United Nations New Agenda for the Development of Africa in the 1990s (UN-NADAF)" by the United Nations Joint Inspection Unit, JIU/REP/95/12, Geneva, 1995.

but the job will be worth the heavy investment of time and resources – as an insurance against chaos and development breakdown further down the road.

Meanwhile, a start can be made by strengthening indigenous village institutions as building blocks of a purposive state development strategy. Rather than leave them to decay in the bin of history, these institutions should be reformed and purged of their obnoxious traditional relics (e.g. witchcraft or extended-family parasitism) and given space to grow and solidify into the cornerstone of the new national polity. The chiefs and elderly, who typically represent village self-governments and are the most knowledgeable about traditional institutions and values, should seize decentralization as an opportunity addressed to them to contribute their traditional wisdom to the modernization process. In other words, by bringing into play indigenous skills and systems of organization as well as institutions villagers understand and identify emotionally with, this approach should galvanize the rural communities to take control of their social and economic progress. That way, it should be possible to start building the Cameroon nation from its ethnic and cultural foundations.

A wrong-headed strategy since independence has been to concentrate resources on building organizationally complex state architectures without first of all accomplishing the necessary and much simpler task of reconstructing the foundation blocks represented by village communities. It can be argued that if some African states are either failing or showing various dysfunctional symptoms, that may be because they are not yet properly rooted socially, culturally and emotionally into their indigenous heartland, meaning village communities. Thus, a “village-first” development strategy¹⁰ would have the merit of making the indigenous socio-cultural factor the basis of the modern state-building process.

That calls for a decentralization strategy anchored in village communities and a pattern of distribution of development assets that gives priority to village and local development requirements rather than to the paraphernalia of the modern state. When each of the 200 000 or so villages in Cameroon become culturally, democratically and economically vibrant, what a prosperous, democratic and peaceful nation all of Cameroon shall become! The existing appalling contrast between glittering city lights and rural darkness would then be remembered as an absurd development experiment that sooner or later had to collapse like any building without a foundation.

It should be recalled that the European state model prevailing today in Africa was in most cases actually built from the community level upwards in a long and often bloody process of state formation. The communities in many cases such as Switzerland or Germany, formed the States, not vice versa. European immigrants replicated the same brick-by-brick state-building process in the United States for example, but not in African colonies where their goal was to extract resources, not to establish states from their societal foundations. That mission now devolves upon Africans themselves, who could borrow some lessons from South-East Asia where cultural empowerment (e.g. development of national languages and ethnic identities and institutions coupled with heavy and priority investments in education as a modernization imperative) has been the self-confident galloping horse pulling the cart of economic and industrial growth. In the somewhat different African context where the state system is almost wholly dominated by the European colonial legacy, seeking the cultural kingdom first would

¹⁰ The Chede agricultural development project in Muambong has given rise to an international development network which is now promoting “village-first” development approaches in Africa, based on the experience acquired over fifteen years in promoting agricultural development in the landlocked village community of Muambong.

mean doing the first things first, that is giving priority to the socio-cultural and economic development of African villages so that they become the taproot of the modern state.

3.10 Developing village democratic governments

Just as the indigenous nuclear base of villages has been marginalized in the process of nation building, so have grand national democratic experiments been mounted without first of all establishing viable village democratic models. While village councils or committees exist in varying forms in Cameroon and elsewhere on the continent, their effectiveness as democratic development experiments is checked by (a) lack of political, administrative and fiscal decentralization to the rural level; (b) their informal and often evanescent character; (c) their almost total dependence on external agencies (domestic and foreign) for the setting of their development agenda and its implementation; and (d) the generally limited democratic and accountability processes that exist between the councils and the rest of the village community. Calling them “village council” or “village committee” does not evoke the same gravity of purpose and breadth of responsibility that would be associated with a “village government” for example, which denotes institutional permanence and full control by a community over its future and destiny. In the present circumstances, most Cameroon villages –especially the landlocked ones – remain miserably stuck on the sidelines of the national economic mainstream and democratic system.

By the terms of the 1996 Cameroon constitution, each Province or Region will have two tiers of government, regional and local, the latter probably corresponding to existing district arrangements. The constitution does not specifically provide for self-government below the district or local government, but does not rule it out either since it commits to “recognize and protect” traditional values and institutions conforming to democratic and human rights norms. The constitution therefore allows for traditional chieftaincies to evolve into micro-democratic experiments based on indigenous value systems. The population of a typical district in Cameroon can range from 50 000 to over 300 000, whereas that of a typical village in Kupe-Muanenguba for example ranges from about 50 to over 1000 but rarely surpassing 2000 inhabitants. The villages are generally organised into clans as the most identifiable constituents of each ethnic group or tribe. Because clans are strong community and cultural markers, achievement motivation is likely to be highest at clan level, for example in an inter-village development competition scenario, to be discussed later.

Each village however small has a village chief or person of equivalent rank, and the same applies to clans. Since traditional customs (including especially land tenure practices and dispute settlement procedures) reside within clans, it would seem logical to make each clan and any willing adjoining villages into a village democratic experiment (hereafter called village government or village community). Even a village as small as 50 inhabitants can have its own democratic experiment, just like in private-sector companies or non-governmental organizations, which function or are required to function democratically. However, the author’s focus is on villages as clan units headed by second-category¹¹ chiefs. Thus a “village community” denotes a clan consisting of a grouping of small villages like in Muambong (KMD) or existing as a

¹¹ Traditional chiefs in Cameroon are organized into three categories: category I chiefs are paramount chiefs representing the interests of entire ethnic group or tribe; second category chiefs represent clans or equivalents; and third-category chiefs have authority over villages. Currently without a paramount chief recognized as such, Kupe-Muanenguba has mostly second and third category chiefs.

“compact” village of different extended families like in Nyasoso (KMD), with a population of about 1000 and more inhabitants. Such village communities should seize the opportunity of decentralization to organise themselves into village democratic governments, to be recognized as such by local governments. Where because of rural exodus or other reason a clan may be too small to constitute such a self-governing entity, the clan in question could choose by referendum to be associated with a neighbouring clan to ensure that the community represented by each village government consists of a minimum of 1 000 inhabitants.

Such village experiments would represent a valuable ethnic democratic laboratory for the state democratic system. They should also provide a peacefully competitive framework for the expression of ethnic and clan identities which the current state-building process has tended to silence or ignore, resulting in “tribalism” or ethnic loyalties being forced to manifest themselves in informal, covert and sometimes violent channels. Thus, if viable village democracies can be built to function autonomously, peacefully and transparently, that would be crucial, and perhaps indispensable, to the predictable and peaceful functioning of democratic institutions on all other levels - local, regional and national. Once a villager is made fully aware of his civic rights and duties in a village democratic environment, he would know how to exercise the same rights and perform the same duties in the national democratic arena. By experiencing the value and power of his ballot in a village democratic contest, the villager would also know how to use his ballot wisely in national elections.

The same applies to other basic principles, such as free and fair elections, secret balloting, vote rigging, valid and invalid ballots, avenues for peaceful resolution of electoral disputes, or respecting the rule of the majority by bowing graciously to the verdict of the ballot box. Once villagers are fully conversant with these details in their village setting, and understand how to use democratic avenues to extract accountability from elected officials at whatever level, or to cause positive changes in their social and economic conditions, they would become democratically literate and enlightened citizens whose contribution to the political health of the nation would be all the larger. This potential benefit in the national theatre of village democratic experiments confirms that democratic development and socio-economic development are not separate but mutually re-enforcing pursuits. This conclusion justifies the need for comprehensive and integrated support (cultural, democratic, social and economic) for the development of African villages.

But can traditional chiefs promote a village democratic project and is indigenous self-rule receptive to modern democratic prescriptions? The answer is yes since traditional governance institutions not only had some democratic tenets such as consultations and assemblies but also are required to conform to democratic and human rights requirements under the national constitution. That is where sets in the need to reform and modernize indigenous political systems as may be necessary, just as European and Asian countries modernized or “democratised” their monarchies in the long march of history. The reform process would, for example, include the following elements:

- (a) traditional chieftaincies cease to exist only by title and become full-dress democratic models of village governance;
- (b) by the same token, salaries government currently pays out to chiefs on their individual basis or on the merit of their simple title should henceforth form part of allocations it would be appropriate for national government to earmark for village governments, which should decide democratically on the question of remuneration for their chiefs;

- (c) village chiefs become fully conversant, not only with indigenous traditions, but also with the law of the land, human rights and democratic principles of governance;
- (d) each village community formulates and adopts a basic law or “constitution” to guide its democratic experiment;
- (e) in the interest of uniformity and predictability in the functioning of village institutions, the local government could help formulate a model of such a constitution for all village communities within its jurisdiction;
- (f) consistent with national constitutional requirements, each village community decides to drop the hereditary tradition of its chieftaincy where it exists and to elect village chiefs (while maintaining the title) on the basis of their conversance with traditional lore, integrity, demonstrated leadership qualities, and effective residence in the village community concerned;
- (g) as an alternative to elected chiefs, each village community could decide democratically to retain a “constitutional chief” (similar to European constitutional monarchies) with largely ceremonial functions separate from an elected village executive responsible for day-to-day management of village affairs; and
- (h) villages without a formal chieftaincy institution but having an informal leadership structure in place should build their village government on such a structure subject to a democratic process.

Whatever the status of existing traditional leadership in the villages, the fundamental requirement is for each village community, as defined earlier, to organise itself into a democratic system of self-rule, with a basic legal text or statute based on the constitutional principle of freedom of association. Such a village government would obviously have, as its principal organs: a clan assembly (village legislature or parliament) possibly consisting of the heads of all clan households (men and women); a village senate and judiciary of about 10 persons elected from among third-category village chiefs or heads of extended families as may be appropriate; and an executive branch headed by an elected village chief (Chief Minister) and structured to mirror the organization of local government (local council) in its composition and development programme. That way each member of village government or “minister” would have responsibility for a specific sector (culture, democracy development and sports, health, information, agriculture, information and communication technology (ICT), education, economics and finance, public works, etc).

These village officials would articulate and lobby for the village’s development needs at district and higher levels of government, represent the village and participate in the design, formulation and evaluation of projects in which the community has a stake, whether initiated by the community itself through self-help endeavours, or by government. The extent to which performance of these village-government functions should be subject to financial remuneration would be best decided in the process of drawing up a village constitution. However, since the functions are not likely to be full-time regular duties, at least initially, but rather an add-on to the farming or other professions of the officials concerned, an option would be to agree on self-motivating voluntary work by these officials so that they can demonstrate their principled commitment to the welfare of their community, and thereby prepare themselves for higher

representative duties on behalf of their village electorate. Where the duties evolve into full-time service, the village Assembly would decide on remuneration. Furthermore, each community should decide whether or not to have “political parties” either as village-level extensions of local, regional and national political parties or as separate policy platforms specific to the circumstances of each village.

The chief minister would be in charge of the village’s cultural development. He/she should work to revive and refine traditional institutions and customs, not just mechanically repeating them, but protecting their spirit and purpose while enriching their form and style, and to this end making the most of modern technologies. The traditions in question would include, for example: birth, wedding, and funeral ceremonies, specific cultural societies, traditional crafts, ceremonial costumes, story-telling, dances, music, drama, and periodic agricultural festivals, all of which should make it worth living in the village and should hopefully attract village/rural tourism and reverse migration to the cities and abroad.

The objective here would be to re-create and restore to the village environment its erstwhile cultural effervescence and social discipline and cohesion. The minister for democracy and sports would educate the villagers on the meaning of democracy and democratic rules and accountability at government and individual levels. As the chief referee for village sporting events, he/she should stress the similarities between democracy and sports, especially football, in terms of transparency, enthusiastic participation of fans, need to respect ground rules, varying degrees of sanctions for foul play, and peaceful acceptance of results.

Ensuring that villagers remain in excellent health and fit for farm work in these days of raging HIV/AIDS is obviously of primordial importance, and the village health minister should know that only too well. He/she should, for example, ensure that the village has in place effective HIV/AIDS and malaria education and prevention programmes. He/she should also be the primary agent for promoting healthy habits and healthy lifestyle in the community, setting health development standards, including individual, family and community hygiene standards, serving as the village’s sanitary inspector, managing the village’s healthcare resources and ensuring the efficient delivery of healthcare services.

The minister of agriculture should strive towards a green revolution in the village. The information minister should keep the community regularly updated on new legislation at whatever level is likely to affect the community one way or another, track and communicate news on developments in the rest of the country or inform on new development projects of potential concern to the community. The economics and finance minister should be responsible for: fund-raising within the community, country and abroad; data collection and management for the village’s own government and for the needs of the district government’s statistical service; management of community projects; promoting a frugal lifestyle and savings culture; training farmers in the preparation of production plans and budgets, record-keeping and book-keeping; managing relations between the villagers and the local bank; and seeing to the profitable sale of villagers’ agricultural production.

The ICT minister should be responsible for the village’s multimedia centre (further discussed below). In that capacity he should be the ICT brain trust of the village government and head a team of ICT teachers who should continuously train the villagers in the productive use of ICT resources for farming and personal purposes, and otherwise foster ICT literacy in the community. For computer illiterate villagers, particularly the elders, the ICT minister should also serve as their e-mail postmaster and scribe by operating e-mail accounts on their behalf for

communication with their kith and kin beyond the village. The education minister should operate a literacy development programme for non-literate villagers; see to it that universal primary education is fully implemented in the village, and develop and manage an education career for the community youth, with strong emphasis on agricultural, technical and vocational training. Other sector ministers would replicate at community level and in their respective areas of competence the responsibilities of the local councils.

By understanding the process and practical implications of discharging accountability and trust to the village electorate, these officers would be conscious of their village-level training for higher responsibilities in local, regional and national governments. In addition to shadowing the national government establishment complete with ministerial titles and periodic “cabinet meetings”, village governments should also be encouraged to have other state symbols, such as anthems and flags that would further stimulate their sense of participation in nation building. By understanding the meanings behind those symbols at village level, they would also understand their meanings at national level.

3.11 Community self-help volunteerism

The spirit of volunteerism, which once ruled in traditional African villages, has regrettably all but disappeared in many communities along with other life-support and self-help traditions. Yet, this form of “social capital” needs to be reinvented and expanded considerably, especially in financially impoverished rural communities, which should be made aware of their self-help development potential. The “paradox of impoverishing abundance” may be relevant in this context because villagers generally ignore that they are economically more independent and naturally better-supplied than city-dwellers in terms of their ability to cover the basic essentials of life: free accommodation, however wretched; free farmland and food; pristine environment or one much less polluted than in the cities; safety and security, etc, which are the fundamentals of what development should be about. With proper organization and judicious use of the plural capabilities available within each community, it should be feasible to build on this baseline self-support system as the wedge of a poverty-alleviation strategy that does not depend on government or the donor community.

That should be possible in the village organizational context discussed in the foregoing paragraphs, since the core rationale for a village government is to enable each rural community to be organized adequately to implement and control its development agenda initiated from within the community itself, whether or not supported externally. Village communities would be best advised that should they come to perish as a result of official neglect no one in government would face prosecution or jail sentence for violating their constitutional right to development. And while the villagers could be entitled to sue government at national and/or international level for dereliction of its constitutional duty to share national resources equitably, it should not be forgotten that the constitution promises no free meal to anyone, and that the democratic freedoms guaranteed in the constitution are meant to be used and exercised actively, legally and democratically by all citizens to the best of their informed ability for their social and economic advancement.

As such, while government should indeed be held to account for its national development stewardship, the same degree of accountability also applies to individual citizens and communities for what they are able to achieve for themselves through self-help. More specifically, each village community should translate into reality the slogan of “development

ownership” by striving to become the primary agent of its own welfare, no more passive spectator of development initiatives dropping from above. The rallying question should be “what can we do for ourselves” and not “what can national or local government or foreign assistance do for us” to beat poverty?

External support will, of course, be indispensable in the provision of some public goods which village communities cannot finance on their own. Even in this area, however, self-help village involvement and contributions will remain crucial in ensuring the proper utilization and regular maintenance of rural infrastructure they depend on for agricultural production and livelihoods, such as access roads and bridges, food warehouses, healthcare centres, primary schools, water pumps, sanitation systems, etc. Such contribution to maintenance tasks and costs would be essential in cases where local or higher levels of government prove deficient in performing these duties, as has been the case since independence.

Each village government would thus need to have its own self-help development budget (independent of any external support) and its own secure and regular sources of revenue. As an example, there could be two main revenue streams, the first being democratically assessed financial contributions each year by resident and non-resident community members, and the second being financial returns on community investments (by village government), such as a community farm, poultry, cattle ranch, piggery, guesthouse, or public transport vehicle(s). A community of at least 1000 resident and non-resident inhabitants can implement any or all of these investment project ideas by combining members’ financial contributions with their contributions in kind, namely self-reliant voluntary actions. Each community is likely to have in its midst or abroad engineers, technicians, agronomists, and other professionals who could contribute free-of-charge their technical and supervisory expertise in the realisation of such investment projects, or maintenance tasks relating to public infrastructures used by the community.

With the availability of the community’s own technical expertise and labour force, the costs of such projects would be reduced to their bare material inputs, to be financed from members’ assessments. Performance and renewal of the village government would then be linked among other parameters to the financial returns accruing to the community from the investment projects in question, to the efficient and prudent management of resultant finances and transparent reporting to community members, and to the quality of maintenance of rural infrastructure available to the community. The same principle of volunteerism would apply as matching contribution to community projects financed from external sources. If villagers are to regain self-confidence in their achievement capabilities and thereby re-assert control over their cultural, social and economic universe, the principle of self-help volunteer actions would need to be re-instituted within each community as an expression of group solidarity more honourable than financial capital.

That critical perspective on community development, which has been forced into oblivion by the monetisation of village economy and resultant pathological dependence on money and external assistance to get anything done, could be stretched even further by aiming at a “money-less” village lifestyle for one week or so each year (similar to fasting periods in some religions) so that villagers can recreate or simulate traditional life-support practices of autarky and barter economy – how to stay fit and healthy in a week without a dollar to spend or the need to spend a dollar!. That could result in the incubation of a village thrift culture whereby gratification is deferred and savings keep growing for the rainy day after. Which brings us back to the theme discussed earlier: how traditional values and lifestyles could inform the modern development

process or how the old and the new systems of rationality can both be employed to craft the new nation states.

3.12 Decentralization strategy for poverty alleviation

3.12.1 From village government to local government

As can be inferred from the foregoing, a development-oriented decentralization strategy for Cameroon (and other African countries) should, in the first instance, recognize and promote indigenous self-governments organized democratically as building blocks of a Cameroon nation state that draws its cultural sustenance and socio-economic vitality from the heartland of its villages. Such micro-level self-governing entities should be encouraged as self-help community initiatives under the responsibility of re-invigorated traditional chieftaincies duly democratised or where non-existent under the constitutional principle of freedom of association and assembly, in the same way that government currently promotes common interest groups. The formal or informal relationships that might exist between these community institutions and the local (communal) government would be best left to each local or district council. The most important requirement should be to give freedom and encouragement to the village institutions to develop into vibrant micro-democracies that would not only form the nuclear base and laboratory for national democratic institutions, but would also spear-head community self-reliant endeavours – to finally slay the bane of dependence on external assistance at whatever level of government or society.

Local governments (and entire governmental system) would have to recognize that village-level democratic experiments are as important as the social and economic development of these communities, which should be made aware of how to use democratic levers to:

- (a) hold themselves and their representatives at all levels to account for development and project outcomes;
- (b) articulate their socio-economic needs through effective and regular participation by their representatives in local government deliberations and shaping of its decisions;
- (c) resolve intra- and inter-community disputes peacefully; and
- (d) participate constructively in the national democratic system.

That would imply a comprehensive approach to supporting village governments.

The terms of reference and budgets of local governments should consequently include requirements for such support with the understanding that successful village-level democratic experiments would translate into efficient and predictable functioning of local government institutions, and that in turn should positively affect the workings of the regional authority. Similarly, if village governments rely more on their own self-development capabilities than on external support, that would enable local government to allocate its development resources on a more strategic plane that benefits all the villages of the district as a whole. Thus positive democratic and development actions at the base should generate multiplier benefits at broader levels of national society.

3.12.2 Key desirable functions of local government

Some of the key functions of local government already touched on in preceding paragraphs would include strong support for indigenous cultural and institutional revival and village democratic experiments. To that would be added, as priority functions, rural infrastructures (especially district roads and water supply); economic planning and statistical services¹²; agricultural development including extension services, inputs and farmer-credit facilities; healthcare; waste disposal and sanitation; educational and training institutions (especially primary and secondary as well as technical and vocational training); and possibly district law and order services. Although the present trend at national level is to privatise the provision of many of these goods and services, it should be remembered that just as local governments are likely to differ in their administrative capabilities at the onset of decentralization, so will the districts vary in terms of their private-sector capacities – especially financial. KMD districts for example will probably have a deficit on both levels because, as noted earlier, KMD is predominantly rural and hilly, and has not had the benefit of any major public investment since independence. Accordingly, the extent to which the above-mentioned functions can be privatised and the enabling or compensatory “development catch-up” resources to be allocated to local governments, will have to take account of the specific circumstances of each district.

3.12.3 Apportionment of national revenues

How national revenues will be shared among the three tiers of government, to which we should now add the fourth tier of village government, should be considered sufficiently important to require Parliamentary action and probably even a popular referendum. At a minimum, the resource apportionment formula, including vertical and horizontal resource distribution principles, should be established by law and implementation of the formula should be transparent and predictable. An equitable constitutional right-to-development formula for the villagers would factor into the equation their many years of exclusion from national investment priorities, the failure of many rural development projects to relieve poverty in most of the country’s villages, government’s withdrawal in the 1980s of farmers-support schemes, and the steep fall since then in international commodity prices.

Taking all that into account, a fair deal for village and local governments under the new system of decentralization in Cameroon would require some serious correction to the existing lopsided system (inverted pyramid) in the consumption of national resources. Any agreed formula should result in at least 30 per cent vertical allocations to village and local governments combined in the light of the desirable functions proposed above for local governments and the serious backlog of infrastructure provision and maintenance in the rural areas in particular, as will be seen in the next chapter. Additionally, the principle of horizontal equalization of development capacities and opportunities would justify affirmative-action supplements for villages and districts in landlocked, long-neglected, and topographically handicapped Divisions like KMD.

¹² Considering the paucity and unreliability of existing rural-sector statistics in Cameroon, systematic gathering and analysis of data covering all development sectors would be a particularly useful function of local government to ensure accuracy of statistics in the rural sector, and serve as rural databank for other levels of government and international organizations. Computerization of local government should facilitate this function.

3.12.4 Inter-village cooperation and coordination

Village governments, assisted or not by local government, should actively promote cooperation among themselves in order to enhance their collective bargaining power and effectiveness in their relations with other tiers of government (local, regional and central) and international development partners. For example, inter-village transversal strategies would be necessary in the democratic process of electing to the local and regional councils those representatives most capable of promoting and lobbying for villagers' priority needs; negotiating and adopting common platforms in defence of villagers' interests; sharing of facilities, services and expertise available at district or regional level; collectively identifying and implementing projects concerning several village governments, especially infrastructure projects; pursuing a coordinated cultural development agenda, particularly with respect to local languages shared by several clans; and emphasizing the need for inter-clan economic solidarity.

In order to institute such cooperation and coordination on a sustainable basis that can grow progressively in concentric circles, village governments should pursue the ultimate goal of a Cameroon *village development mouvement*. This should start with village governments in each district organizing themselves into a formal self-help association, which can then be replicated and widened at Divisional level, such as a KMD village development union (or Fako, Lebialem, Manyu, Meme, and Ndian village development unions in the South West Province), leading to a South West village development federation, and finally to a Cameroon village development network or movement. The purpose of such a farmers' defence organization, which should be independent of government, would be to ensure that the aspirations of the rural population and of farmers more specifically are heard loud and clear in local, regional and national legislative chambers, as well as in the process of development planning and resource allocation at all levels.

In the above respect, it is noteworthy that Cameroon's PRSP candidly states on page 29 that *“access to infrastructure services in Cameroon is much less satisfactory for rural than for urban dwellers. This factor may well be widening the economic gap between the cities and the countryside, which is home to half the country's total population, and more than two-thirds of its poor. The situation is explained in part by the fact that it is costly to provide infrastructure services to sparsely settled areas. It also reflects the relative weakness of rural people's influence on the budgetary process and of their ability to attract public spending on their behalf* (emphasis added). *Particular attention must therefore be paid to this situation when it comes to decentralizing public services, to ensure that some zones are not overlooked in favour of others, which would have the effect of fragmenting both the economy and society, and would constitute a major stumbling block to any effort to reduce poverty and inequality”*.

This quote, and in particular the highlighted portion of it, underscores the exposition in foregoing paragraphs on the failure of rural development projects to circumvent the obstacle represented by government centralization, resulting in villagers being locked out of the national economic mainstream, with hardly any voice or means to change this unjust situation. Village governments and the village development movement proposed in these pages should therefore work persistently to level this inequality.

When that happens concretely within the next ten years or so, an important spin-off benefit for the city dwellers would be that, as village life becomes comprehensively more attractive than city life, the pattern of rural exodus to the cities that has been fuelled by the long neglect of the

rural population, and which neglect and exodus have made Cameroon one of the most urbanized countries in the developing world, would start decreasing significantly and continuously, meaning fewer and fewer demographic pressures on urban infrastructure and services, leading to improved living standards and quality of life in the cities and decreasing demands on public expenditures for urban development. In this scenario, the village development movement will have succeeded in achieving within a single decade a development exploit – levelling the national economic playing field for all – which the government had failed to achieve within four-plus decades.

In order to ensure the effective build-up of that movement on a sound footing, each village development union should have dedicated officials and a secretariat, backed by a pool of specialists on-call for (a) providing training to union members in all rural development disciplines, especially agriculture, technical and vocational training, through a combination of self-help or local government support; (b) appraising and evaluating for the farmers the rural development relevance and substance of the decisions and projects of local and regional councils; and (c) advising on follow-up or countervailing measures. The pool of specialists at the service of each village development union should ideally include a solicitor specializing in constitutional, democratic and human rights issues, who would be responsible for coaching union members in democratic principles and practices, and making them aware of their rights and duties under the national constitution and human rights conventions.

The solicitor should also be able to tap into the expanding arsenal of international law against economic crimes, such as the United Nations Convention against Corruption,¹³ so as to enable union members to defend their rights and seek redress and damages, for example by bringing lawsuits against any tier of government or any public official at whatever level, in the event of material evidence justifying such action under national and international laws. Village development unions and federations should have observer status in local and regional councils; serve on a competitive basis as executing agencies for rural development projects; work to establish twinning partnerships with similar farmers' groups abroad; and interact directly with the international development community on behalf of their memberships.

3.12.5 Inter-village development competition

Cooperation and coordination among the villages should be reinforced by an inter-village competitive spirit such as would give to the process of community development the emotional injection it has missed until now. That can be done by borrowing a leaf from the most popular and passion-packed sport in Cameroon, namely football. By this approach community development would be likened to a game of football played by the villages of a particular district or Division. Local government (as referee assisted by officials of the village development grouping concerned) would continually monitor (thanks to its regularly updated rural development databank) the development performance, especially through self-help initiatives, of each village government in different disciplines and stage at the close of each year a festive occasion for the award of a community development trophy to the best performing village government and medals to second and third runners-up. That means there would be a village

¹³ Adopted by the United Nations General Assembly (resolution 58/4) on 31 October 2003, and signed (but not yet ratified) by the Cameroon government on 10 December 2003. On the adoption of this Convention, the UN Secretary-General had this to say: "Corruption hurts the poor disproportionately – by diverting funds intended for development, undermining a government's ability to provide basic services, feeding inequality and injustice, and discouraging foreign investment and aid".

development champion each year with a record or benchmark to defend or lose to another village the following year.

Competition would seek to establish a composite benchmark as well as sector-specific benchmarks in the following areas for example: indigenous cultural development achievements; peaceful and efficient functioning of village governance institutions; accumulated community savings; proper maintenance and output of farms; livestock development; sanitation and cleanliness; financial proceeds from community self-help investments; quality and availability of healthcare; school enrolment rate in each community; or village GDP or income per capita. Prizes should go not to individuals but to communities, in the spirit of a communitarian approach to rural development. Any village sufficiently self-confident in its capabilities can challenge another to a development contest (like in any traditional wrestling match, for example “eswe” in Bakossi) for the attainment of a specific development standard by a set date. The competition bar would be raised each year to ensure continuous improvement in community achievement standards overall and by sector. It goes without saying that the same principle of competition should be replicated by the regional governments at inter-district level, and by national government at inter-regional level, with special emphasis on the building and maintenance of development infrastructures in which Cameroon still has a lot of ground to cover, particularly in the area of road infrastructure discussed in the following chapter.

3.13 Decentralization driven by ICT

The phasing in of government decentralization represents an ideal opportunity for re-engineering the national public administration by introducing electronic government (e-government) at all levels. The potential benefits could be enormous provided there is determination strong enough to streamline the present government bureaucracy from root to branch. Civil service head count would be substantially reduced, administrative transaction costs and delays would be trimmed, vertical and horizontal intra-governmental communications would be speeded up nation-wide, and the administration of projects and programmes would be more transparent and efficient. However, the government’s current plans seem to fall short of that ambitious goal, as may be inferred from the charter of the National Information and Communication Technologies Agency (ANTIC), established in April 2002 to promote ICT initiatives in the country, including the creation of 10 multimedia community centres in each of the ten provinces to enable the population to access Internet information in the different development sectors.

With respect to the rural sector, the government is designing an excellent pilot project (The Community Telecentres Project) which aims to build such centres in 92 rural communities so as to improve the rural population’s access to information resources, reduce the digital gap between urban and rural areas, create indirect employment around the centres, provide logistic support to MINAGRI’s early warning system, disseminate market information to producers and technical information to professionals in rural zones. This is a timely and commendable initiative which, if successfully implemented together with the extension of the national telephone network to the entire rural sector, would fill a real and pressing need. The Telecentres project, though still on the drawing board, could provide an entry-point for introducing e-government at the level of decentralized authorities. Indeed, the communitarian, horizontal and very practical nature of ICT corresponds to the village value system, which it would be wise for decentralized administrations to promote actively to bolster the psychological self-esteem and self-confidence of the village population, as discussed in the preceding paragraphs. Accordingly, ANTIC should be required to

provide the necessary technical backstopping to regional and district authorities to enable them to set up and operate an e-government system and reap from the onset the multiple benefits of automated administration. The district governments should in turn establish a multimedia centre in each village community. ANTIC's mission should stress training of ICT trainers at regional, district and village levels in order to foster an ICT culture within the decentralized administrations.

4. RURAL ROAD INFRASTRUCTURE

“Where a road passes, development follows”¹⁴

“Countries that have made concerted efforts to provide infrastructure in rural areas – for example, Indonesia and Malaysia – have succeeded in reducing poverty dramatically”¹⁵

“Transportation and communication infrastructure feature prominently in people’s demands. They want isolation to be broken down in every region, through rehabilitation and maintenance of the existing road network, the paving of major national and inter-provincial highways, the expansion and upkeep of rural roads so that farmers get their output to market” (PRSP for Cameroon, April 2003).

4.1 Infrastructure and development

The stock of physical infrastructure (roads, railways, watercourses, telecommunications, electricity, water-supply, airports and seaports, transportation systems, sanitation, sewerage and waste-disposal systems; etc) is certainly as vital and indispensable to a country’s development as arteries and veins are to a human being. By this analogy, there can be no development to talk of without the physical infrastructure elements mentioned above, and the quality and pace of a country’s development, particularly in agriculture, seem to correlate with the density and efficiency of the national infrastructure available. The World Bank’s 1994 World Development Report, which was devoted to this subject, contained a number of findings which underscore the importance of infrastructure to development and poverty alleviation.

For example, the report observes that the adequacy of infrastructure helps determine one country’s success and another’s failure in diversifying production, expanding trade, coping with population growth, reducing poverty, and improving environmental conditions. Good infrastructure raises productivity and lowers production costs, but has to expand fast enough to accommodate growth momentum. Infrastructure capacity grows step by step with economic output; a 1 per cent increase in the stock of infrastructure can generate a 1 per cent increase in gross domestic product (GDP). The report further finds that the type of infrastructure available can determine the impact of growth on poverty, since most of the poor are in rural areas, and the growth in farm productivity and non-farm rural employment are closely linked with infrastructure provision. Citing China’s example, the report notes that an important ingredient in this country’s success with rural enterprise has been a minimum stock of transport, telecommunications, and power at the village level, resulting in rural enterprises employing more than 100 million people or 18 per cent of the labour force and producing more than a third of national output.

In the case of India, research findings revealed that infrastructure availability and resultant low transport costs increased farmers’ access to markets and led to considerable agricultural expansion, and that modern irrigation methods produced higher yields. Because improved infrastructure lowered the costs incurred by Indian banks in doing business in the rural areas, the

¹⁴ Quoted from Lotsmart N. Fonjong: Changing fortunes of government policies and implications for the application of agricultural innovations in Cameroon, *Nordic Journal of African Studies*, 13(1) : 13-29 2004.

¹⁵ World Development Report 1994: Infrastructure for Development, World Bank, Oxford University Press, 1994.

banks expanded lending to farmers who used the funds to buy fertilizer which in turn further increased yields. In Bangladesh, it was found that villages classified as “most developed” in terms of access to transport infrastructure were significantly better off than the “less developed” villages in terms of agricultural production, incomes, health and labour demand. Still according to the report, adequate stock and reliability of infrastructure are key factors in the ability of countries to compete in international trade, even in traditional commodities. It was found, for example, that because of Africa’s infrastructure problems, shipping costs from the continent to Europe were 30 per cent higher for plywood and 70 per cent higher for tuna than those from Asia to Europe, and these extra costs had to be borne by African exporters. This commercial aspect of the problem is further discussed in chapter 7.

4.2 Cameroon’s record in road infrastructure provision

The foregoing paragraphs rest the case for infrastructure as a sine qua non for development and agricultural expansion more particularly. The same paragraphs together with data in table 11 comparing Cameroon’s road network density with that of Costa Rica, Cote d’Ivoire, Ghana and Malaysia help explain, together with its poor decentralisation score noted previously, why Cameroon’s agricultural production has lagged behind the performance of the other countries since the 1960s, as found in chapter II, despite Cameroon having perhaps the strongest natural factor endowment among the countries studied. The same findings underline the reasons why Cameroon, among these same countries, has the highest poverty rate of close to 50 per cent at present and certainly much worse living conditions in its rural heartland.

Table 11: National Road Network Density

	Paved Roads (kms)					All roads (paved and unpaved)	
	1960	1970	1980	1990	2003	2003 (kms)	% of Surface Area
Cameroon	N/A	931	2,496	3,593	4,288	34,300	7.2
Costa Rica	N/A	1,400	2,424	5,600	7,896	35,892	70.2
Côte d’Ivoire	829	1,258	3,057	4,216	4,889	50,400	15.6
Ghana	N/A	4,620	8,050	8,250	11,665	39,409	16.5
Malaysia	9,646	15,351	20,461	27,720	49,935	65,877	20.0

Source: compiled from data in the World Development Report 1994 (World Bank) and The World Factbook (cia.gov)

Table 11 further shows that Cameroon had a considerable late start in the first decade following its independence in 1960 in building up its physical infrastructure. The political leadership during this period appeared to place more emphasis on political unification of the English-speaking and French-speaking zones of the country, which was consolidated in the seventies, than on the building of infrastructure to support socio-economic development and lure foreign investments. As a result, Cameroon’s paved road network in 1970 was very limited indeed compared to the achievements of the other four countries, representing merely 20 per cent of Ghana’s for example in the same year. And although its paved road network expanded

significantly by 168 per cent from 1970 to 1980, the same rate of expansion has never been sustained ever since. The country's infrastructure assets increased by 44 per cent from 1980 to 1990, and only by 20 per cent from 1990 to 2003.

As a measure of its poor historical record in road infrastructure provision, Cameroon has been outperformed consistently by the other countries since 1960, except in 1980 when it had a slight edge over Costa Rica with just 25 per cent of Cameroon's population and 10 per cent of its surface area. In the following decade (1990), Costa Rica's infrastructure package was nearly double the quantity for Cameroon which ended up having in 2003 by far the smallest road network coverage relative to surface area (7 per cent), compared to Costa Rica's 70 per cent, Malaysia's 20 per cent, Ghana's 16.5 per cent, and Côte d'Ivoire's 15.6 per cent. These figures relate to the availability of infrastructure hardware and not to servicing or maintenance operations on which data are not available. But for anyone familiar with the state of Cameroon's roads in the past few years, especially in the South West Province, it is obvious that maintenance services have been either erratic or very poor, probably due to the country's protracted economic crisis since the mid-1980s. The situation is much worse for rural feeder roads as already noted in the case of KMD being a quasi-landlocked rural community whose agricultural potential has been gutted as a result.

4.3 Making rural road infrastructure an imperative priority for poverty alleviation

Cameroon's PRSP recognizes the country's inadequate road infrastructure in the rural sector, but does not seem to measure the full gravity of the problem, especially its potential to scuttle the national economic growth rate of 7 per cent projected by the document for the rest of the present decade. Indeed, most of the objectives stated in the PRSP (expansion of education and health services, accelerated industrial growth, poverty alleviation in the rural sector, sub-regional integration, or enhanced commodity exports) would come to naught without concerted national emphasis on building, in the very first instance, a national rural road network supportive of the agricultural sector which already employs 70 per cent of the population, where poverty is starkly concentrated at present, and where progress should conduce to the attainment of other objectives of the PRSP.

Such a sequencing strategy focused on the rural infrastructure factor controlling the other objectives (as opposed to spreading out available investment resources thinly over numerous fronts without a decisive assault on any) would be further justified by the infrastructure development backlog accumulated before and aggravated during fifteen years of economic crisis. Moreover, solving the rural infrastructure crisis as the overarching national priority over the next five to ten years would without doubt underwrite the success of administrative decentralisation measures envisaged by government.

As Indicated in the PRSP, the government has adopted a Rural Road Maintenance and Rehabilitation Strategy (NSERR) which is designed to integrate external assistance from several sources to implement a plan for the rehabilitation of 8 000 km of rural roads. The strategy provides for the central government to finance the rehabilitation of the road network and for the district governments and beneficiary communities to take over maintenance responsibilities. District governments are expected to subcontract maintenance activities to local small and medium-size enterprises (SMEs) or organizations. NSERR is apparently to be translated into law (rural road management law), the draft of which includes the following objectives among others:

alleviating poverty by improving accessibility and living standards in rural areas; stakeholder participation in the management of rural roads; a sustainable rural road maintenance fund to ensure financial availability and efficient payment procedures; and establishing new institutional arrangements mapping out respective responsibilities at central, regional and local levels.

Although NSERR can certainly be commended for pointing in the right direction, it must nevertheless be doubted whether its package will be equal to the formidable task at hand. Firstly it is a strategy still on paper and yet to be tested in its operational deployment. Secondly, it is not clear what is meant by “rehabilitation” of rural roads. Does it mean paving the roads or simply grading them as has been the case since independence, with the very poor results described in preceding paragraphs and summarised in table 11. Would new road-building technologies be brought into play for the first time to ensure the all-season and long-term durability of the rural road network? Thirdly, the proposed 8 000 km of rural roads earmarked for “rehabilitation” represent a mere 30 per cent of the existing – and grossly inadequate – rural road network of the country (as shown in comparison with other countries in table 11). It is not clear what will happen to the remaining 70 per cent of the existing road system.

Furthermore, the need is not articulated to expand considerably the present network so as to ensure a national road network density that connects all districts and urban centres inter-se. At present, rural local governments do not yet have material or operational existence and it’s difficult to predict when they will all be fully functional despite the recent adoption of the statute on decentralization. It may be observed that it took the government eight years to act on the constitutional provisions on decentralization, and if that is any guide it could take several more years to translate the decentralization law into reality in all the provinces and districts. In the meantime, the central government will very likely continue to provide rural infrastructure services using the same delivery system that has failed the rural sector.

Since the current state of the national rural road network justifies government’s emergency action, decentralisation of the Ministry of Public Works and of the existing Road Fund could be accelerated in priority so that infrastructure development becomes the first major and emergency task for which decentralised administrations should start building up their operational capacities, with the direct support of the international donor community. The merit of such a dispensation would lie in the reduced overall cost of rural infrastructure provision since projects implemented by local governments for their communities are known to cost about 30 per cent less than similar projects administered by central governments for the rural areas. The huge difference in favour of local governments is due to lower overhead charges, fewer financial leakages along the way, and higher standards of accountability to community users of such infrastructure projects. These would thus represent a crucial training ground for honing the capabilities of decentralised administrations.

Although the Cameroon government, under donor policy influence, is relying increasingly on the private-sector construction industry for implementation of infrastructure projects and partly on road-user charges and petroleum levies to finance such projects, it is doubtful whether this strategy would be helpful in the case of rural roads as opposed to major national public works with clearly and immediately identifiable investment returns. Rural infrastructure projects are not easily amenable to cost-benefit analyses even as their importance is beyond dispute. Poor Cameroonian villagers should also not have to pay road tolls which are generally not paid by the rural population in other countries. Public infrastructure provision is everywhere government’s foremost responsibility. The same should be true in Cameroon. The contention that the geographical dispersal of many Cameroonian villages increases the costs and puts in doubt the

cost-benefits of providing rural roads may not be valid since such villages can be actively encouraged (not forced) to co-locate in order to facilitate their accessibility to public services. That is what happened in Muambong (KMD) some fifty years ago.

Contracting out construction and maintenance operations to the private sector, domestic and international, makes economic sense especially for projects of national and regional scope. How effectively the same approach will work at local government level with companies not having their base in the localities concerned is open to question. In principle the issue of the local base of a company building or maintaining community roads should not matter so long as local government can be held to account for the quality of work performed. In practice, however, it matters to the villagers whether their projects are implemented by “one of their own” or by “outsiders” whom the villagers cannot fully hold to account, and who are not always trusted to do the right thing for them or to empathize with their conditions.

Because private-sector capacities in most rural districts of the country are at present either limited or non-existent, rural local governments will in many cases have to take on the operational responsibility of direct construction and maintenance of rural roads at no cost to the rural population and pending the emergence of local private-sector capacities. That was the case in the former West Cameroon, where the Public Works Department (PWD) generally performed a splendid job, with no road-user charges. The same set-up should still be possible in today’s South West Province or regional administration for example. As an alternative to a regional solution, the local governments at the level of each Division could establish, in the interest of economies of scale and scope, a single public works department supported by a “national volunteer corps” suggested further below, the regional administration, and the international donor community.

The local public works departments could also forge twinning arrangements with similar services in the developed countries, including in the context of supranational communal/municipal organizations. As such, an effective system of decentralisation should make it possible for syndicates of local governments to mobilise construction resources (technologies, equipment, training and financing) from different external channels to a degree not possible for the central government in present circumstances. Such potential sources of foreign support would be lost under a road-building strategy relying mostly on the private sector. Even if local government outsources road construction and maintenance, it would still need to develop its own public works expertise to enable it to supervise works and manage contracts with the private sector construction industry. Moreover, local government performance in the crucial area of rural infrastructure would be a salient function of democratic accountability to its electorate. So this political accountability aspect also should be borne in mind in devising a rural road strategy.

External resources would only be additional to the comparatively more substantial domestic resources that would have to be released to regional and local councils for rural road construction and maintenance. Cameroon clearly needs a ten-year master plan and exceptional resources for a vast nation-wide effort to build up rural infrastructures seen as the wheels of the country’s future economic prosperity. As observed in the World Development report cited earlier, each 1 per cent increase in the national stock of infrastructure translates into 1 per cent GDP growth rate. But that is only true in cases where there was an adequate base of infrastructure to start with. For Cameroon to raise its current 5 per cent growth rate to the projected 7 per cent as from 2006, it would first have to address its present road infrastructure

deficit (seen in table 11) at an unknown cost in order to raise the baseline to the level of other comparable countries such as Côte d'Ivoire or Ghana.

The investment required for such a catch-up effort would probably more than consume the increase from 1.5 per cent to 2 per cent of GDP projected for infrastructure assets in the PRSP. Having addressed the country's infrastructure deficit, the government would further have to increase its annual investments in infrastructure by at least 2 per cent of GDP to sustain the projected 7 per cent growth over the next ten years or so. That would amount to a significant infusion of resources into road construction and maintenance, especially in the rural zones, but it would also mean job creation and laying a permanent and modernized foundation for more rapid economic growth and sustained poverty reduction in the long term. Such future perennial benefits make this approach worth the required mammoth effort and investments. The government's proposed NSERR package is therefore obviously inadequate for the vast challenge ahead. Which way forward?

The government should underline the national scope and urgency of the problem by rapidly expanding the army's engineering corps and assigning to it a wedge role in rural road construction duties, particularly in areas seriously handicapped by hilly landscape, in the context of the ten-year infrastructure master plan suggested above. The relevance of this proposal is that, whether the present high poverty rate in Cameroon is qualified as a "national emergency" or "national security threat", it would in either case justify the army's involvement. *"By this concept of a national development army, military resources would be transformed into development resources and military goals into development goals while bringing to the development process the same military sense of urgency and discipline as well as techniques of mobilization, planning and execution. This would be the best way to wage war on poverty whose multifaceted effects represent the most serious national security threat at present in many countries of the region. One area among others where this concept could have significant cost benefits is in the building and maintenance of national physical infrastructures, especially urban-rural road networks which are limited and poorly maintained in many African countries"*¹⁶.

The above quote is acutely relevant to the present Cameroon context with special reference to table 11 above. In view of the scope of the work that needs to be done rapidly to build and expand the country's rural road system, it would be ill-advised for the government to count solely on the domestic and international private sector, which could prove prohibitively costly. A national mobilisation effort is needed for rural road construction and maintenance, spearheaded by the army along the lines suggested above. So why not create a national volunteer corps for this purpose, schooled in military discipline and fitted with development combat uniforms, with the military's engineering arm serving as its cutting edge? Such a national volunteer corps would additionally be supported by a considerably expanded and modernised National School of Public Works (Ecole Nationale Supérieure des Travaux Publics (ENSTP), to ensure that it has the appropriate number of research and teaching staff required for accelerating training in public works. It should also be provided with modern training equipment and be capable of sourcing advanced road-building technologies from abroad (e.g. South Africa, Brazil, India, China, EU and the U.S. for example).

ENSTP should also strengthen its collaboration with the National Engineering School (ENSP) at the University of Yaoundé 1, especially in the area of new material sciences, and also build partnerships with sister institutions in Africa and abroad. For example, Ghana's Building

¹⁶ UN Joint Inspection Unit: "Evaluation of the United Nations New Agenda for the Development of Africa in the 1990s (UN-NADAF)", op. cit.

and Road Research Institute (BRRI)), based in Kumasi, and established since 1952, undertakes research into all aspects of road design and construction with a view to assisting the construction industry to be more efficient, safe and economical. Additionally, it focuses its research on the identification and transformation of local materials for use in the construction industry. In Asia, India's Technology Information Forecasting and Assessment Council (TIFAC: www.tifac.org) has as part of its mission to identify and source technologies for building roads which are cost-effective and energy-saving, have higher quality assurance, higher user acceptance, higher safety standards, are environmentally friendly, economically viable, and have future relevance. The United States Department of Transportation (www.dot.gov) supports development of a new generation of technologies for building safer, longer lasting, and less expensive roads and bridges, thereby reducing construction costs and time cycles.

In conclusion, a strategy for building a national road network would logically require, because of the urgency and scope of the problem, a national mobilisation effort crystallizing into a volunteer corps spearheaded by the military's engineering arm, and supported by ENSTP and its provincial/regional feeder affiliates. The strategy should not only seek to build up the national road network to proper standards but also to establish a national science and technology capacity to develop local construction materials and support public works and the local construction industry. The Cotonou Agreement and AGOA, which include infrastructure development provisions, could also be handy in seeking technical assistance for strengthening ENSTP and its feeder schools (one in each province/region) and for the provision of construction equipment and technologies so as to ensure that Cameroon is able to build and maintain the nation-wide road system it sorely needs to wheel its agricultural expansion and economic prosperity.

Adequate decentralisation to the local level and a national rural road network outlined above constitute the necessary administrative and physical infrastructure for spurring agricultural expansion and economic growth. The adequacy and efficiency of that infrastructure can of its own stimulate increased production by rural farmers, but only up to a point. Yet another vital ingredient is required to optimise farmers' production potential to limitless levels of performance. Science and technology (S&T) applications to production and processing are needed for that purpose. Using the analogy of automobile construction to illustrate the importance and inter-dependence of the different components of the strategy being proposed herein, decentralisation to the local level (discussed in chapter 3) corresponds to the body work of the vehicle or locomotive we are building; national infrastructure (covered in this chapter) represents its wheels; and science and technology (covered in the following chapter) provides the engine.

5. SCIENCE AND TECHNOLOGY

“Since most poor people are farmers, that means agricultural yields need to rise. Technology can help. The green revolution of the 1960s and 70s filled millions of Asian bellies, but has been much less successful in Africa, largely because the high-yield crops that fuelled it (mainly new strains of rice and wheat) are less widely planted there. The newer technology of genetic modification shows promise – scientists are starting to create crops that are more pest-resistant and nutritious”¹⁷

“Science is intimately integrated with the whole social structure and cultural tradition. They mutually support one another – only in certain types of society can science flourish, and conversely without a continuous and healthy development and application of science such a society cannot function properly”¹⁸

5.1 African crisis

Africa’s development crisis can easily be equated to a science and technology (S&T) crisis as reflected in the continent’s very limited generation and domestication of S&T capabilities to accelerate the transformation of its natural resources. According to the International Foundation for Science (IFS: www.ifs.se) African mainstream scientific production is marginal compared to the rest of the world and highly concentrated in South Africa and Egypt, which together represent close to half of the continent’s production. The two countries are followed by Morocco, Tunisia, Kenya, Nigeria and Algeria, which account for 26 per cent of Africa’s output of scientific publications. Cameroon is ranked 11th with approximately 1.5 per cent of the total African production of articles in mainstream journals¹⁹.

Africa’s overall S&T deficits are also reflected in its limited industrial base and ever increasing marginalization in the global trade of manufactured goods, as shown in OECD’s database (www.oecd.org). Yet another symptom is the dearth of management culture across the board, from the strategic level of political and economic governance to the micro enterprise level, since management basically requires an S&T mode of thinking and action – order, organization, method, procedures, work discipline, consistency. Another measure of the gravity of the region’s S&T crisis is that R&D expenditures by African countries are so infinitesimal or negligible that the data are not even available for most countries²⁰.

In contrast, the 2003 aggregate R&D investments of close to \$500 billion by the developed countries (averaging 2.5 of their GDP) surpassed Africa’s total GDP. Those developing countries, especially in East Asia, with relatively significant R&D investments (above the 1 per cent average for all developing countries) have generally delivered impressive performance in economic growth and poverty reduction. Since endogenous S&T capabilities are nurtured first and foremost by the quality of educational and research institutions, the inference from the above comparisons is that African governments are not investing nearly enough to build domestic S&T capacities as the ultimate and only sustainable solution to poverty in the region.

¹⁷ The Economist (Leader: Empty bowls, heads and pockets), July 31st-August 6th 2004

¹⁸ Talcot Parsons quoted by J. A. Daly: Building science and technology capacity in developing countries (Abstract) in Sustainable Development International, July 2003

¹⁹ International Foundation for Science (IFS): Scientific Research Capacity in Cameroon, An Assessment of IFS Support. MESIA Impact Studies, Report No. 5, by Jacques Gaillard and Eren Zink, Stockholm, October 2003

²⁰ See World Bank world development indicators (2004): R&D as % of GDP.

This neglect is even more puzzling at the level of the United Nations Economic Commission for Africa (ECA), the region's foremost international development organization, which has hardly assigned to S&T in its current programmes, besides ICT, the level of priority that would have been expected. About 80 per cent of the inter-country S&T institutions established by ECA in the past three decades have either collapsed or are functioning rather unproductively, in contrast to CGIAR institutions for example. The PRSP for Cameroon has equally missed its mark under the S&T heading since this area has not received any cross-sectoral priority and is not specifically mentioned as one of the seven strategic priorities promoted by the document.

Yet the instrumental role of S&T in the development of nations is universally acknowledged and can hardly be over-emphasized. As the above quotes from the Economist and Talcot Parsons suggest, there can be no agricultural expansion or green revolution without S&T solutions and no society would function properly without sustained S&T capacities. According to the International Strategy for the Fourth United Nations Development Decade, *“the re-activation of development in the decade of the 1990s on a sustained basis will be linked to the ability of the developing countries to participate in the rapid advances in science and technology that have characterized the global economy in recent years and will continue to do so in the future. Knowledge today is a crucial determinant of economic progress”*²¹. And for the Inter-Academy Council, *“sound scientific knowledge is fundamental to addressing the critical issues – such as economic transformation and globalisation; reduction of poverty, hunger and disease; and the sustainable use of natural resources – facing the world today”*²².

That S&T capacities determine wealth creation is evident also in the huge income disparities between the developing and advanced economies of the globe, which disparities simply reflect a correspondingly wide digital divide (in S&T instrumentation) between the two groups of countries. Ranking countries by GDP performance, income per capita or human development index is almost the same as ranking their S&T capabilities to find solutions to development problems, produce and trade goods and services efficiently. For example, Africa's current global share of S&T output of barely 1 per cent if not less correlates with its 1 per cent or so share of world merchandise trade. Considering the universal recognition that S&T is the engine of economic growth and poverty reduction, it must be wondered why African governments, individually and collectively, are not assigning to the subject the massive priority it deserves in a region with a historically known handicap to start with. If S&T is the ultimate cure for poverty, Africa's present intractable poverty conditions cannot be surprising since these conditions derive from the region's low S&T intensity. For a start, the African Union could perhaps organise periodic summit meetings devoted exclusively to S&T awareness building in the region, from primary education to University level.

5.2 Fundamentals

Considering that agricultural expansion rises or falls with a nation's S&T capacities, it would serve a useful purpose to clarify and demystify the terms of the discussion and outline some basic elements of the subject matter in order better to situate the present Cameroonian S&T environment and then illustrate how it affects the country's agricultural performance.

²¹ Annex to UN General Assembly resolution 45/199, paragraph 56.

²² The Inter-Academy Council: *Inventing a Better Future* (A strategy for building world-wide capacities in science and technology), Amsterdam, January 2004.

5.2.1 Concepts and definitions

Science can be defined in the comprehensive sense used by UNESCO to mean knowledge (from its Latin root “scientia”) comprising hard or engineering sciences, social sciences and the humanities.

- Scientific research denotes the ability to find solutions to problems of all kinds – natural, biological, social or cultural – using theoretical and experimental as well as intuitive and analytic processes.
- Research and Development (R&D) means a scientific advance or innovation achieved in a particular area of work, or simply the development of a new product or process. R&D thus combines the research (basic and applied) process and its result, such as an invention, pre-industrial model, prototype, or new way of doing things. According to UNESCO, R&D is any creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications.
- Technology can be defined as the application of knowledge (applied knowledge) and more generally as the skills, experience and devices used by people to improve their lives and surroundings. As such, technology is explicit or implicit in R&D, which thus represents the junction between science (scientific research) and technology (concrete research result or product), at least in its minimalist conception.
- The S&T continuum starts with basic research, leading to applied research, which in turn leads to a solution or innovation (technology) in the form of a concept, product, process or system, which is tested, evaluated and patented (or not) as intellectual property of the inventor or producer, then leaves the researcher for the production system and the market for mass diffusion, followed by further improvements and adaptations.

Definitions of S&T in technical literature increasingly limit the concept to technology, as derived from science. For example, according to the former United Nations Centre on Transnational Corporations (UNCTC), technology is the stock of knowledge which permits the introduction of new or improved machinery and equipment, products, processes and services. In a wider sense, technology includes additional elements, such as management and marketing skills. Technology therefore takes a number of different forms, including hardware, such as machinery and equipment; software such as blueprints, formulae, or process specifications; and the services of technicians and professionals for quality improvements, management and marketing know-how, process and product design, etc.²³

For its part, the UN Economic and Social Commission for Asia and the Pacific (ESCAP) finds that technology can be disaggregated into four embodiment forms: object-embodied technology (facilities or technoware); person-embodied technology (abilities or humanware); document-embodied technology (facts or infoware); and institution-embodied technology (framework or orgaware). Still according to ESCAP, any resource transformation can occur only when all four technology components are present at a certain minimum level, since facilities

²³ UN/ST/CTC/89

need operators with special abilities and these have to be strengthened gradually from operation to improvement and generation of facilities; facts representing accumulated knowledge need to be updated regularly; while the framework has to evolve continually to meet changing requirements.²⁴

For FAO, developing countries need to generate both relatively unsophisticated technologies (e.g. improved farm tools, simple irrigation systems, planting of indigenous crops and trees for soil and water conservation) and high-level technologies, or at least have access to them (e.g. biotechnological methods of gene manipulation). Priority needs to do so include: well-trained research workers imbued with the importance of developing technologies appropriate to local conditions; adequately funded workshops and laboratories; strong links and cooperative arrangements with other research centres; attention to socio-economic research and “second-generation” problems, such as technologies for sustainable agriculture or effects of technological innovations on income distribution.²⁵

5.2.2 Not an exclusive human preserve

The above clarifications can be further simplified by recalling that technology is far from being an exclusive human endeavour. For example, nature is the foremost embodiment of S&T so much so that humankind may never be able to decipher the code of its engineering skills, as exemplified by the logical systems and processes of nature and of its inhabitants. Technology also is employed in the animal world, as witnessed for example in the craft of beavers building their dams, birds weaving their nests, bees erecting their hives, or termites constructing their “skyscrapers” of termitariums complete with chambers, lanes, gardens and ventilation systems. These S&T exploits are achieved with computer-like precision, without years of prior training in technical or engineering schools, feasibility studies, blueprints, or foreign development aid usually needed by humans to undertake projects. And these achievements require no prior environmental impact studies because they are nestled within the natural environment. Therefore, might some species of the animal world, thanks to their fabulous “IQ” (*“Intuition Quotient”*), be more adept and efficient in technological applications than the human race? Are there lessons here for Africans and for the rebuilding of African villages?

5.2.3 National S&T system

A national S&T system encompasses in particular the governance and policy-making subsystem inclusive of Parliament and the civil service; educational and research institutions; the productive sectors, especially the private industrial sector, professional associations, the media and civil society. To build a national S&T capacity in a typical African country today requires the following ten ingredients not necessarily exhaustive:

1. Political stability and conflict-free society characterized by freedom of thought and expression;
2. National leadership’s keen awareness of the importance of S&T in nation building and economic modernization, and its consistent commitment, materialized by an advisory agency, to building a national S&T culture and capacity;

²⁴ ESCAP: Technology Atlas Project, Volume 1: An overview.

²⁵ FAO: Agriculture Towards 2000, 1987

3. Legislation and policies to regulate S&T activities in conformity with international norms as well as ethical and risk considerations, and to steer such activities towards supporting strategic development goals;
4. Commanding priority to investments in the education system at all levels, with emphasis on technical and vocational training and S&T teacher training, aimed at achieving at the earliest the highest possible literacy rate and critical mass of skilled intermediate manpower, which constitutes the humus for S&T growth;
5. Appropriate investments in research institutions appropriately staffed and equipped, with a clear mission to focus on salient national development objectives such as natural resource transformation, agricultural expansion, value-addition and food security, coupled with incentives such as recognition through prize awards, motivating remuneration and service conditions designed to attract domestic and foreign²⁶ talent to the research profession and, where applicable, reverse scientific talent drain;
6. National, regional and international networking or twinning of researchers and research institutions (with emphasis on South-South cooperation in researching on common problems) to promote sharing of research results, information and staff, technical visits, lectures, conferences and joint projects;
7. A scholarship programme for specialized or further training of national scientific personnel in foreign institutions in disciplines of strategic development interest;
8. Fiscal and other incentives for domestic and foreign investments supportive of national S&T priorities, particularly in the agricultural and food industry sectors;
9. Permanent cross-pollination (interactions and partnerships) between the S&T supply and demand subsystems, that is a participatory approach to S&T development involving educational and research institutions, on the one hand, and the productive sectors which are the end-users of most research results and trained manpower, as well as the mass media which should be informing and educating the population on domestic and foreign S&T issues, on the other;
10. A motivated and dependable public service imbued with S&T (especially ICT) capabilities through training and retraining programmes and effectively implementing S&T policies and creating an optimal environment for investments that stimulate the transfer, adaptation and diffusion of technologies.

5.2.4 S&T as competition

A major factor accelerating S&T advances is competition at different levels, starting from within the research community itself as its members compete for recognition at home and

²⁶ In order to maximize the benefits of different global perspectives and experiences as well as qualities of intuition, African countries should institute the policy of attracting/employing researchers from developed and developing countries so as to build multiracial and multi-country research teams focused on major research projects responsive to their priority development needs.

abroad, or race to beat one another in finding a solution to a problem or disease (e.g. HIV-AIDS or malaria). Industrial enterprises within and among nations also compete through S&T breakthroughs for productivity benchmarks as well as increased profits and market share. Which is why the private sector companies in the advanced countries especially allocate relatively significant budgets to their R&D units. The intellectual property generated in the process of such competition becomes an important knowledge asset enhancing the overall market value of the proprietor corporations.

Competition for military superiority has always been a trigger of new technologies since time immemorial, but more so in the past few decades in the developed countries than ever before in history. This fact was most evident during the Cold War as the two ideological camps vying for global military supremacy invested profusely in military R&D projects (arms race). Although their original purpose was for military uses, many S&T achievements of the Cold War period, especially in the U.S. (atomic energy (bomb), satellites, Internet, cell phones, etc), have now been mostly converted into peaceful and civilian uses or have dual purposes.

With the end of the Cold War, competition in S&T shifted more decisively from the military arena to the economic domain. Relative S&T capabilities have become the most important determinant of success or failure in global trade and economic competition among nations and firms. Countries with a solid S&T capacity, as earlier defined, attract more foreign direct investments, which generally constitute vectors for the transfer of new technologies and managerial cultures, and compete better in the increasingly knowledge-intensive global marketplace than countries without a similar capacity. It is for this reason that African countries have collectively been losing market share in the past four decades (as shown in chapter 2) within the multilateral trading system, and why they are being marginalized in investment and trade globalisation processes. The link between Africa's low S&T capacity and its marginalization has not received its due emphasis in the NEPAD framework document.

5.2.5 The risks

S&T is a two-edged sword that can cut positively or negatively, especially when harnessed (or hijacked?) to military and industrial applications as has become the norm in the advanced countries. Some opinion segments in these countries believe, rightly or wrongly, that S&T progress poses a threat to humanity. The most commonly cited specific risk concerns the damage that S&T-powered industrialization wrecks on the natural environment, with potentially ruinous long-term consequences for humankind, such as climate change phenomena which some scientists believe could in future profoundly alter agricultural systems, sink entire island countries, and create numerous "climate refugees" in the world, among other predicted grave consequences.

Another problem is what to do with radioactive and other toxic wastes produced by the world's industrial complex. Germ warfare or biological weapons, whether in the hands of terrorist groups or in the arsenal of conventional armies, pose yet other unpredictable risks to humankind. Rumours that circulated at one stage to the effect that the HIV/AIDS pandemic now destroying lives in Africa and elsewhere had originated from its accidental release from a military laboratory somewhere on the globe did not help to quell our fears about potentially far-reaching S&T risks. Further still, the raging debate on human cloning or genetically modified foods and their unknown long-terms effects on the health of consumers illustrate some of the ethical and safety limits of S&T uses in human society. The threat is that African countries

importing such high-tech solutions currently lack the S&T capabilities to swiftly respond to and manage potential accidents in the same way the United Kingdom for example responded to the outbreak of mad cow disease on its territory. Industrial S&T advances can also produce adverse effects on the workforce, deskilling some workers, making others redundant, and taxing governments' social and employment policies.

5.2.6 Underlying cultural tensions and questions: Defining the finality of development

S&T has been a common feature of every society from the earliest recorded times, and as observed earlier, is not even a monopoly of the human race. It is a socio-cultural expression illustrative of the means each society uses to satisfy its fundamental necessities, and to organise its way of life and environment in accordance with its worldview. For example, indigenous African societies developed a whole range of technologies, some dating back to two million years, for everyday use from farming and hunting to ceremonial functions, art and fashion²⁷. These technologies reflected their Animistic culture²⁸ and vision of life as humans being simply part and parcel of nature and not the lords of nature.

In contrast, the considerably more mechanistic civilization of the West, which has grown over the centuries into the modern S&T revolution that is now sweeping the globe, is also emblematic of the Western view of nature as something of a wild beast to be tamed, controlled and exploited to the maximum for human progress. This approach to nature proceeds from a linear vision of life as requiring constant "progress" and material accumulation. Their key words here are: transformation, organization, chronology, movement, growth, speed, efficiency, effectiveness, results, as opposed to ritualistic adaptation to nature and timeless stability of natural evolution prized by traditional Africa's worldview.

These almost opposite Animistic and Western visions have also logically produced similarly opposite S&T systems and tools, referred to as "primitive" in the case of traditional African societies, and "advanced" or "modern" (that is in their ability to transform nature and products) in the case of Western societies. For example, in warfare traditional Africa's weapons, especially spears and arrows, even when tipped with poison, caused much less damage to human life and to the natural environment than atomic, fragmentation, and other bombs, biological weapons, cannon fire, cruise missiles or landmines, which today characterize "modern" warfare.

The fact of the matter is that Western S&T civilization, which has practically become universal, the mother of "globalisation", has produced a natural resource consumption lifestyle that does not seem sustainable (for all) into the far future, besides the serious risks cited above. For example, China, which embarked not that long ago on this linear route to progress, is already beginning to cough a lot of smoke for its more than one billion inhabitants. Must each and every African villager have a per capita income equivalent, for example, to that of the United States? It can only be wondered where the resources would come from to meet everyone's needs if each

²⁷ See, for example, G.T. Emeagwali, *African Systems of Science, Technology and Art*, Karnack House, London, 1993, and by the same author, *Science and Technology in African History*, Edwin Mellen, New York, 1992. Also visit www.africanhistory.net. These indigenous knowledge systems, not very much helped by the absence of a written tradition in much of Africa, lost their historical continuum to modern-day Africa during the European colonisation, from which point the region became technologically and therefore economically dependent on Europe.

²⁸ Shared in varying degrees and forms by many ethnic groups in the developing world. Animism can be likened to some elements of Shamanism in some Asian indigenous cultures.

and every society on earth consumed natural resources at the same rate of intensity observed in the developed countries and increasingly in other emerging or industrializing countries.

Nevertheless, although the Pygmies of Central Africa and the Namas of Southern Africa, considered to be among the oldest members of the human race, still epitomize by their existential longevity the virtues of human respect for nature, Africa can no longer revert to its distant idyllic past when the worship of nature tended to rule village life. Obviously, therefore, Africa is “adapting” and must adapt to the new S&T age. The question is what will happen to its cultural base and fundamental worldview in the process of adaptation to “modernity”. Should Africans become completely Westernized in their pursuit of modernization? Is that desirable or even possible? If not, have they started to seek answers to the philosophical and yet practical question of the finality of development, and which technologies to use to advance their concept of development?

What should be the best S&T policy for developing African village communities in ways that not only protect the natural environment (pressing global concern) but also and more fundamentally protect Africa’s cultural base and promote its original worldview (globally neglected but equally pressing village concern). If all of humanity adopted a single worldview and lifestyle, where would regenerating values come from to save humanity in the event of its self-inflicted accidents or even suicide? What about cultural and even racial diversity, which mother nature probably created to serve a purpose for humanity?

That Western societies are similarly attempting to adapt to “the laws of nature” (without necessarily abandoning their way of life) can be seen in expanding waste-recycling (waste management) policies, the emergence of green political parties (sort of white man’s Animism), and intensifying concerns about the need to protect the natural environment, over-harvested by a consumerist civilization driven by S&T. The good news is that this Western S&T adaptation process, though geared to western societal needs, is producing environmentally-friendly technologies (especially renewable or more efficient energy systems less dependent on the burning of fossil fuels) which correspond to traditional Africa’s approach to S&T and should therefore be ideal for African village communities. The two contrasting visions of life on earth are therefore beginning to converge, and in the future might well conjoin into a single vision if and when “sustainable development”, meaning nature-friendly S&T uses for “*human welfare*” – defined as satisfaction of the essentials of life for all and not material affluence for the few – becomes a universally practised development strategy.

5.3 Cameroon’s S&T system

Two years after independence in 1960, the government established a Council for Scientific Research that reported directly to the President. This Council mostly coordinated S&T programmes inherited from the colonial period and which consisted essentially of research initiatives funded by the French government in the context of cooperation agreements between the two countries. Successive restructuring through the seventies and eighties of the government’s S&T policy and coordination mechanisms culminated in the creation in 1992 of a separate Ministry of Scientific Research and Technology (MINREST), alongside the Ministry of Higher Education (MINESUP) responsible for the country’s six universities. These two Ministries currently oversee the national educational and scientific research establishment.

5.3.1 Years of institution building

In terms of S&T institution building, the government signalled its clear intent to give priority to agriculture by establishing a national school of agricultural sciences known as ENSA (Ecole Nationale Supérieure d'Agronomie) as early as 1960, followed by the creation in 1961 of the Federal University of Yaoundé. However, as shown in box 4, it was in the 1970s and early 1980s that a robust national S&T institutional system came into being under the aegis of ONAREST (Office National de la Recherche Scientifique et Technique). During this period were established the country's agriculture-related research institutions, especially the National Agricultural Research Institute (IRA); Institute of Zootechnical Research (IRZ); National Centre for Studies and Experimentation in Agricultural Mechanization (CENEEMA); the Institute of Medical Research and Medicinal Plants (IMPM); Institute for Agricultural and Forestry Research (IRAF); Institute for Research in Technology, Industry and the Subsoil (IRTISS); and Institute of Human Sciences (ISH).

This S&T institutional growth was complemented with the establishment of four new University Centres in 1977 (Buea, Douala, Dschang, and Ngaoundéré) in addition to the University of Yaoundé. In 1993 six full-fledged Universities were created including a second University in Yaoundé. The University of Dschang, with an initial mission to train agricultural engineers and technicians, absorbed ENSA which morphed into FASA (Faculté d'Agronomie et Sciences Agricoles). As part of this University was also established a National Institute for Rural Development (INADER) whose work and outputs remain somewhat nondescript. The University of Ngaoundéré absorbed two key institutes, namely the National School of Agro-Industry Sciences (ENSAI) and the University Institute of technology.

Box 4

The changing research community in Cameroon 1965-1987

The changes within the research community in Cameroon during the period 1965-1987 can be broadly characterized in three periods:

From 1965 to 1974: Period during which the management of research structures was ensured by French research institutes. The number of national researchers in the institutes for agronomic research of the ORSTOM increased from two in 1965 to 120 in 1974, while that of expatriates increased from 61 to 84.

From 1974 to 1980: Period of the ONAREST during which the number of national researchers in all the research institutes increased from 120 in 1974 to 152 in 1980.

From 1980 to 1987: Period when the DGRST was established and the status of researcher was instituted formally. The number of national researchers increased from 152 in 1980 to 283 in 1983-1984 and to close to 400 in 1986-1987, while the number of expatriate researchers remained constant at around 82.

Source: IFS, op. cit.

Thus in the first twenty-five years of independence, Cameroon had built up a fairly impressive scientific research capacity spanning all development sectors but with visible priority on agriculture. According to the International Foundation for Science (IFS) in its aforementioned report on Cameroon, the government during this period funded from domestic resources upwards of 95 per cent of all research activities, including staff salaries. The research environment was apparently so stimulating and promising that the funding available to researchers was comparable to that allocated at the time to researchers in France for example. IFS also found that as a result of this domestic S&T capacity, the success rate of Cameroonians receiving IFS grants was comparatively higher (close to 30 per cent) than the average for African grantees (20 per cent), and that Cameroon had the third largest number of IFS grantees, preceded only by Nigeria and Kenya. Unfortunately, however, this situation was not to last.

5.3.2 Years of decline

The onset of Cameroon's economic and financial difficulties in the mid-eighties arrested the expansion of its S&T stock described above. Since then and for over fifteen years, the country's S&T community has contracted inexorably and lost steam and direction. Recruitment of new researchers was frozen indefinitely together with government-funded research programmes. With researchers' salaries slashed, their facilities hardly maintained, and no new projects underway, the research profession lost motivation and recognition. A similar situation prevailed more or less at the Universities where the student population rose sharply to over 60 000 by 2000 while University budgets plunged beyond reason. These difficulties are illustrated in the figures below, sourced from the IFS report. Significant investments in research infrastructure, staff and programmes will be indispensable over the next ten years or so to rebuild Cameroon's S&T capacity to the level it had reached in the mid-eighties.

Table 12: research salaries

Grade	Echelon	Indice	Monthly salary before taxes		
			1992	1993	July 2000
Attaché de Recherche	1	465	240 667	123 798	138 975
	2	530	269 936	132 362	149 050
Chargé de Recherche	1	605	302 723	142 243	160 675
	2	665	322 010	150 148	169 975
	3	715	341 296	156 736	177 725
Maître de Recherche	1	715	341 296	156 736	177 725
	2	785	368 296	165 959	188 575
	3	870	401 084	177 157	201 750
	4	940	428 085	186 380	212 600
	5	1 005	453 156	194 943	222 875
	6	1 050	470 514	200 872	229 650
Directeur de Recherche	1	1 050	470 514	200 872	229 650
	2	1 115	495 587	209 436	239 725
	3	1 140	505 230	212 730	243 600

Source: IFS

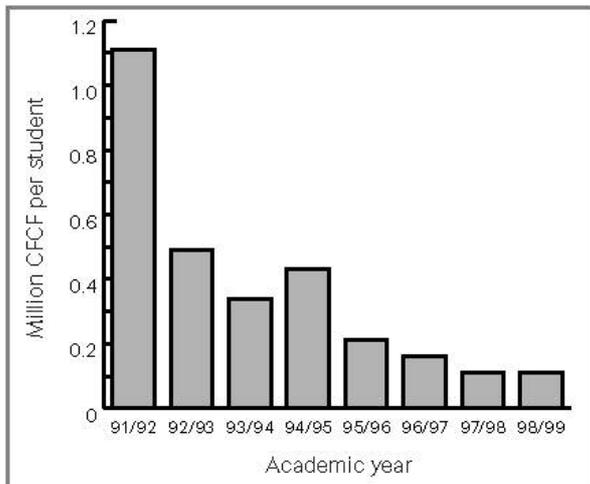
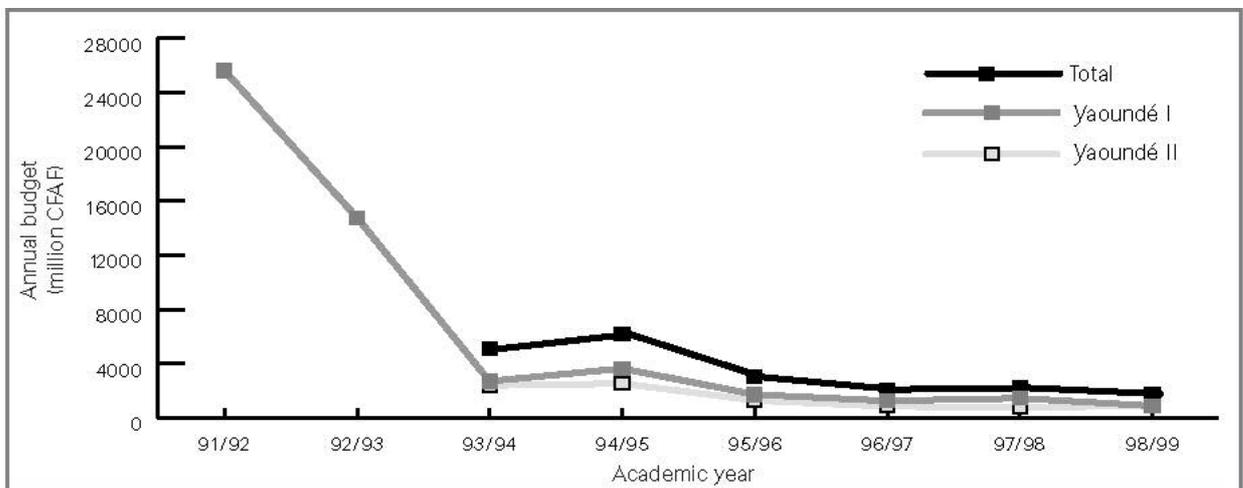
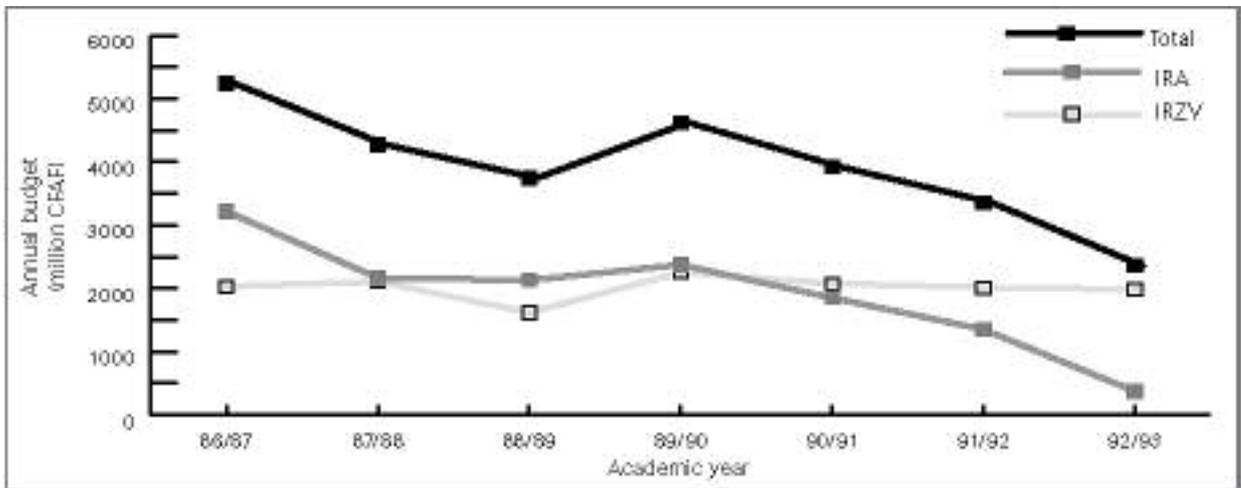
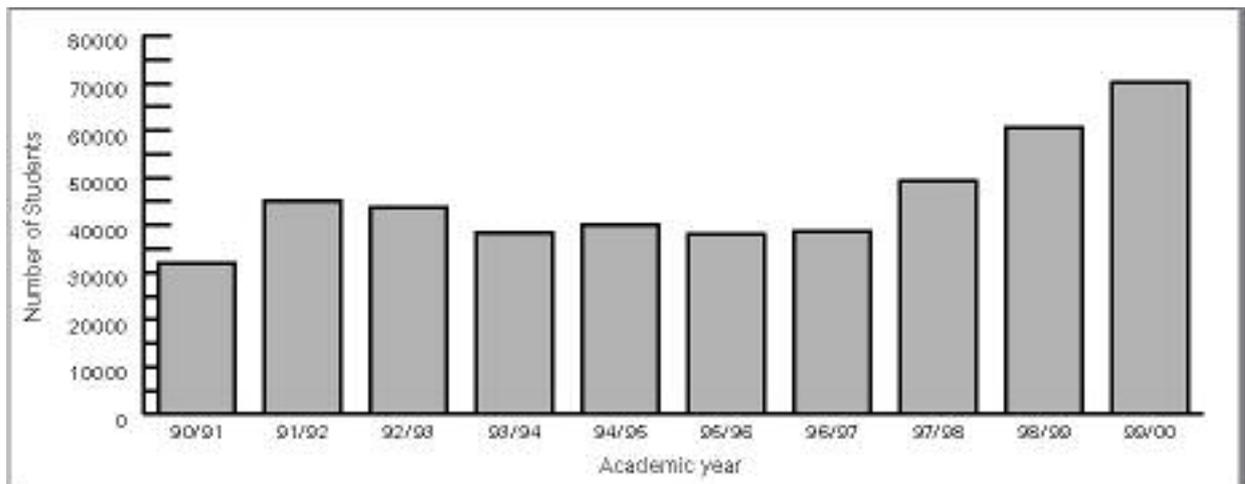
Figure 2: mean budget per student**Source: IFS****Figure 3: budgets of universities****Source: IFS**

Figure 4: budgets of research institutes

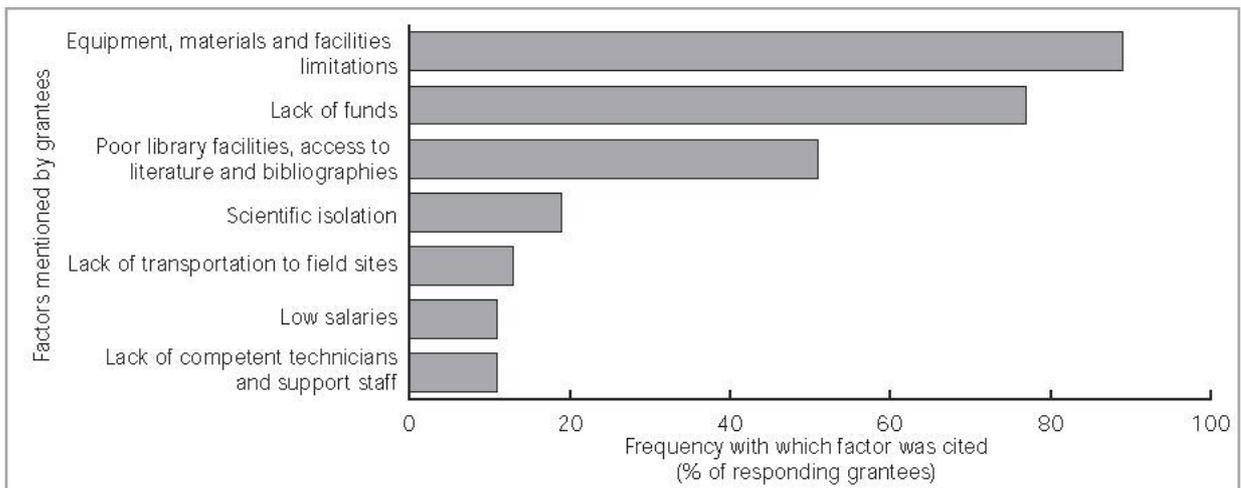


Source: IFS

Figure 5: number of students



Source: IFS

Figure 6: factors affecting research capacity

Source: IFS

5.3.3 Current Situation (2004)

Policy drive: The difficulties outlined above have thrown the national S&T establishment into disarray, depriving it of concentrated focus on agriculture as in earlier years. Established in 1992 at the height of the nation's economic difficulties, MINREST, which is the government's S&T policy directing arm, has hardly moved into stride for lack of staff and funding. Its current seven-year S&T programme (1997-2004) includes 18 "priority" areas of work, from development-related mathematical modelling to nuclear science, but hardly much activity is underway in any of the research areas so identified. Although seven (or 40 per cent) of the areas relate directly or indirectly to agriculture, no clear system of priorities has been defined making agricultural research an overriding preoccupation. Accordingly, Cameroon at present lacks a firm S&T strategic direction.

Institutional coordination: Serious problems of coordination currently exist within the national S&T system. One of the reasons for this situation is that MINREST, which is the institutional parent of virtually all research programmes in the different sectors, has been set up and operates like a distinct development sector, whereas S&T is not a "development sector" like education, health or agriculture, but one that cuts across and involves all sectors equally. Because of this flawed research organization, the work conducted by the institutes under MINREST is isolated from the operational sector Ministries, especially MINAGRI, which are expected to field-test, adopt and diffuse research results. In an attempt to overcome this problem, a memorandum of understanding has been signed between MINREST and some sector Ministries including MINAGRI in the context of a World Bank project (Programme National de la Vulgarisation des Recherches Agricoles (PNVRA), but it remains to be seen how this inter-Ministerial cooperation agreement will work out in the field considering the notorious difficulty in the Cameroon administration of building team work, particularly among staff belonging to different Ministries and even among staff of different departments of the same Ministry. Furthermore, the specialized research institutes under MINREST are divorced from the University/teaching establishment thereby cutting them off from a steady source of research inspiration and innovation within the academic environment.

The above anomalies stem from a broader inadequacy in the strategic steering of S&T programmes. At this level policy and programmatic coordination seems to involve only two Ministries (MINREST and MINESUP), that is only the scientific research and University community, under the National Council for Higher Education and Scientific Research, which apparently reports to the president of the Republic. As observed earlier, however, all development Ministries are directly concerned by S&T capacity building in their respective sectors and programmes, and should therefore be involved in any national coordination mechanism, together with private sector representatives, the media, and civil society, in short all segments with a stake in the national shaping of S&T capacities. The government may consider reviving ONAREST and giving it an enhanced coordination and multidisciplinary focus similar to India's Technology Information Forecasting and Assessment Council (TIFAC: www.tifac.org). An alternative arrangement is outlined later.

In view of the above, it would make supreme sense to decentralize specialized research institutes and their resources to the respective Ministries expected to make use of their research results. In the case of agriculture for example, research would become more thoroughly integrated with the extension system and the agricultural schools under MINAGRI. In such a set-up, each Ministry would become keenly aware of its primary responsibility for promoting S&T in all its programmes, bringing the entire S&T continuum (basic and applied research, testing and evaluating new products, adapting, applications and diffusion) under a single chain of command. MINREST would not have to disappear.

Its role would, however, be limited to the development and enforcement of a national S&T regulatory framework as well as generic or mega projects (China's example: www.most.gov.cn/english) and cross-sectoral activities such as intellectual property issues, negotiating of technology transfer packages from abroad, serving as interface between the national S&T establishment and international S&T community and activities, and monitoring and evaluating the evolution of national capacities, among other things. Under this dispensation, MINREST would come directly under the Prime Minister as constitutional head of government in order better to involve all development Ministries in S&T capacity building in their respective sectors, facilitate inter-Ministerial coordination of the process, and secure the level of domestic and external funding adequate for the challenge. That is more or less the S&T organizational arrangement finally adopted by South Korea following successive restructuring efforts (www.most.go.kr). Five Research Councils reporting to the Prime Minister provide policy direction to research institutes grouped by sector, such as industrial S&T; public technology; fundamental S&T; economic and social research; and humanities. Much emphasis is placed on the transfer and commercialisation of research results, and funding is mostly demand- and project-driven.

Funding and infrastructure: Much of the current funding of research activities is from external sources, usually as part of donor-supported projects, particularly the World Bank and AfDB. With the economic situation beginning to show new signs of life, and with researchers being recruited once more, especially for IRAD, it can be expected that new research priorities would be designed with focus on biotechnological applications, especially to the country's major food crops most of which have for long remained Cameroon's research orphan. With respect to infrastructure, IFS findings indicate the progressive depletion, resulting from years of neglect, of the plant and animal gene pool, debts of research institutes, lack of utilities in some research stations, and degradation beyond maintenance of S&T facilities. To refurbish and reinforce this broken S&T capacity would therefore require considerable injection of new resources. The other

elements of Cameroon's S&T system are reviewed in the following section as they relate more specifically to the agricultural and food industry sectors.

5.4 Agricultural research

5.4.1 Objectives

A workshop sponsored in 1992 by the World Bank's Special Programme on African Agricultural Research (SPAAR)²⁹ highlighted among other things the following ten desirable objectives for agricultural research in the Western and Central African region:

- Ensure food security;
- Reduce post-harvest losses;
- Raise quality;
- Enhance productivity by reducing production unit cost;
- Expand horizontal diversification and value-addition;
- Promote employment creation for a rapidly growing population;
- Supply raw materials for domestic industry;
- Raise ability to compete in regional and global markets;
- Create a dynamic source for foreign exchange earnings;
- Expand S&T options.

5.4.2 Agricultural Research Institute for Development (IRAD)

The above general objectives obviously apply also in the Cameroonian agricultural research context, and most of them featured in the original terms of reference of IRA, which was merged with IRZ in March 1996 to form IRAD. Despite all the problems confronting the research community during years of economic crisis, IRAD (implying also its predecessor) is credited with having developed a few new cultivars of potato, maize, cassava, and peanut. These achievements were thanks to some collaboration with international agricultural research institutes, especially the International Institute of Tropical Agriculture (IITA: www.iita.org) at Ibadan, Nigeria, which also has a research unit in Cameroon.

²⁹ See Proceedings of the Regional Workshop on Revitalizing African Agricultural Research: An Initiative for the Humid and Sub-Humid Zones of Western and Central Africa, Abuja, Nigeria, October 6-9, 1992.

Box 5**REVITALIZING AGRICULTURAL RESEARCH IN CAMEROON:
PROBLEMS AND PERSPECTIVES****Bernard Berka Njovens**

A thorough review of all research programs is needed to improve program structure, discontinue unpromising work, relate findings to client needs, reinforce linkages, and identify gaps in research coverage. A first and necessary step in this direction would be the elaboration of a *Master Plan*, to reassess the *planning, programming and evaluation* of agricultural research on the basis of the country's economic and strategic goals. This demand-driven Master Plan should be established in consultation with the farming and scientific communities, the private-sector, universities, extension agents, non-governmental organizations (NGOs), and the National Agricultural Research Systems (NARSs) of neighboring countries. It should serve as a road map for future action, should have regional relevance, avoid duplication of efforts, and guarantee mutual technology spillover. *Increased linkages and better coordination* are needed between the ministries of research and production on the one hand, and between the different national and foreign research institutes, parastatal organizations, and donor projects on the other.

Given that virtually all farms in Cameroon are integrated multicrop and livestock enterprises, a *multidisciplinary research systems* approach is required. This implies an integrated and flexible research system, which initially defines problems from the farmers' perspective and uses multidisciplinary teams to develop the most appropriate solutions. *Applied and adaptive research* should be given priority, since the research must directly address development-related problems. It must be relevant and likely to yield useful technologies that are adaptable to local constraints and conditions.

There is a need to train more specialized researchers in view of the wide variety of programs that the research institutes are involved with. The research institutes need a better technician/researcher ratio, and a better matching of staff to meet research priority needs. *Institution building* is vital to the development of a professional research environment. The production of science-based technology requires mutual intellectual stimulation, exchange of knowledge, peer reviews, academic incentives, and recognition. These elements are built up slowly over time, and bring success only after a critical mass of scientists is in place. This long gestation period is a precondition for creating an effective national agricultural research capacity. Government should encourage this long-term, forward-looking approach to research.

Source: presentation at the SPAAR-sponsored workshop on Revitalization of African agricultural Research, op. cit.

IITA has done and continues to undertake considerable research on root and tuber crops, especially yams, cassava and cocoyams, which are of direct relevance to IRAD since they are major food crops in Cameroon as well. Some of the problems facing agricultural research in Cameroon are outlined in boxes 5 and 6.

Box 6**ROOT AND TUBER CROPS TECHNOLOGY PROJECT**

The global project on Root and Tuber Crops Technology (RTCT), implemented in Africa by the International Institute of Tropical Agriculture (IITA), has turned out a significant amount of research and development (R&D) products. Their propagation has, however, been limited by inadequate national conveyor structures. The project has national chapters in Cameroon and Zaire, supported in Cameroon by the Institute of Agronomic research (IRA) and in Zaire by the National programme of Applied Agricultural Research and Propagation (SENARAV). The testing and practical application of researched varieties (cassava, yams, cocoyams, etc) are conducted in Cameroon through provincial outreach Testing and Liaison Units, and in Zaire through pilot development projects implemented by about 60 national non-governmental organizations at the intermediate and local levels.

The significant investments in R&D and related training by the host governments, IITA and a consortium of donors including particularly the World Bank and USAID, have regrettably not been translated effectively into national farming systems in both countries for a variety of reasons, including especially:

- (a) The absence of national incentive policy and structural frameworks linking research and development to propagation and production strategies as well as to produce processing and marketing;
- (b) Rudimentary or non-existent farm to market roads, coupled with the scarce transportation means available to farmers and extension services;
- (c) Limited seed stock multiplication enterprises as well as post-harvest management know-how and facilities, with post-harvest losses rising as high as 50 per cent of total produce in parts of Cameroon and Zaire;
- (d) Inadequate involvement of the private sector generally due especially to the limited number of medium-size and industrial farming ventures which are ideally suited for high-tech applications to agriculture; coupled with the dearth of food-processing industries;
- (e) Declining government support as a combined result of national economic difficulties and structural adjustment programmes;
- (f) Limited operational collaboration in Cameroon between the Ministry responsible for science and technology which oversees IRA, and the Ministry of Agriculture which oversees extension services.

It was observed during field investigations that the compound effects of these shortcomings had sapped the original motivation of research and development staff and virtually ruined their fledgling infrastructure in both countries. The lesson is that a thorough pre-feasibility study should have preceded significant research and development investments under the RTCT project in the two countries in order to establish the case for stronger and better-managed vertical and horizontal linkages to the production system, as well as the long-term sustainability of the project's outputs at the level of the targeted beneficiaries.

Source: *Extracted from a report by the United Nations Joint Inspection Unit entitled: United Nations system support for science and technology in Africa (JIU/REP/94/1) (www.unsystem.org/jiu).*

While collaboration exists between the two institutes, the testing, adaptation and propagation by IRAD and MINAGRI extension services, in the variegated Cameroonian farming context (of different zones and altitudes), of the superior root and tuber crop technologies produced by IITA has to date fallen well below expectations (see box 6), an outcome partly due to the limited integration of IRAD with the extension system and lack of access (due to poor rural roads and means of transportation) to rural farmers for on-farm testing and adaptation of the new products. Most rural farmers, at least in KMD, are not even aware of the existence of these products or where to access them in the absence of a systematic programme of communication with the rural farmers on agricultural S&T advances in the country. That is particularly true for cocoyam, a product of prominent importance in KMD and maybe in other parts of the South West Province, and on which IITA and IRAD did some improvement research work in the nineties. The practical outcome of that research is not known to date. A related problem is government's decision to privatise seed production and distribution in the country without a prior inventory being established of local companies and farmers' groups capable of playing that crucial role, an issue further discussed in the next chapter.

With respect to plantain, another major food crop in Cameroon, an important research programme known as PREBAP (Programme de Reconversion de la Banane Plantain) is envisaged by the government in collaboration with CARBAP (Centre Africain de Recherche sur Bananiers et Plantain), based in Djombe, and CIRAD (Centre de Coopération Internationale en Recherche Agronomique pour le Développement: www.cirad.fr), a research arm of the French government. PREBAP, which has a subregional food security objective, aims to double current plantain production in the country in a few years using state of the art technologies to be supplied by CIRAD and the French private-sector banana industry in the Moungo region of the country. The programme additionally expects, if and when implemented during an initial three-year period, to create over 100 000 new jobs, and help launch a plantain processing industry for the production of by-products for the local and export markets.

An important merit of PREBAP is that, unlike the tightly-closed plantation system approach used by the banana industry in the country, it appears directed to small and medium-size farmers who typically grow plantain in the rural zones. It is therefore not unlikely that if this programme succeeds as envisaged on paper, it could very well be emulated by the banana firms (e.g. SBM, SPNP, DELMONTE) which could finally decide to subcontract part or most of their production to Cameroonian farmers duly supported technologically and logistically. This approach would help diffuse advanced production and treatment technologies within the local farming system, raise quality standards to the requirements of global competition, and contribute to enhancing the incomes and profile of Cameroonian farmers.

Therefore, on paper at least and in terms of the government's poverty alleviation objective, PREBAP has the hallmark of a strategically well designed and targeted programme (a one-crop green revolution as it were), which could guide similar joint efforts by IRAD, CIRAD and IITA for example with respect to other food crops, especially cassava, yam, cocoyam, and potato, without forgetting indigenous fruits and vegetables. However, whether the significant amount of about 350 billion FCFA required for PREBAP to take off will ever materialize remains an open question. Nevertheless, the programme's design and thrust clearly show the way forward in terms of what is required to expand agricultural production in Cameroon by improving technologies of crops produced by rural farmers with an eye also on developing a local food processing industry. Accordingly, IRAD, if fired by an ambitious vision, will have every interest

in developing a close association with PREBAP and CARBAP in order to draw useful lessons for work in progress or to be initiated for other food crops, fruits and vegetables.

Research on export commodities (banana, rubber, oil palm fruits, and cotton) is undertaken by major agribusiness concerns in the country such as banana firms, CDC and PAMOL, HEVECAM and SODECOTON) to meet their own requirements and not necessarily to serve the country's small and medium-size producers. The latter however have access at a fee to the products of these companies, but demand tends to outstrip supply, particularly in the case of oil palm nuts. The quality of improvement research on these crops besides banana is difficult to assess other than to refer to chapter 2 above, which shows that while Cameroon more than doubled its absolute tonnage of oil palm fruits from 1960 to 2003, its share of world production tumbled from 3 per cent in 1960 to 0.8 per cent in 2003, compared to Malaysia's share, which rose phenomenally from 1.9 per cent in 1960 to 45 per cent in 2003 thanks no doubt to superior S&T applications to oil palm production and processing in Malaysia.

There is scant information on research work underway on coffee and cocoa produced entirely by rural small holders. The Coffee and Cocoa Seedlings Project (CCSP), the only seed production entity still subsidized by government, does not seem to have a seed improvement dimension, nor is it obvious that it has a network of cooperative links with other developing countries producing these two crops and probably more efficiently than Cameroonian farmers (boxes 7 and 8). For example, according to the Transnational Institute (TNI)³⁰, Nestlé's Malaysian subsidiary, EASTRACO, has been developing tissue cloning from the world's best quality and fastest growing coffee trees, while Philip Morris/General Foods was doing the same. Still according to TNI, large tissue culture coffee plantations are already established in South East Asia. Because of their lack of advanced technological applications, African countries are failing to compete with the upgrading process underway in Asia and necessary to maintain or improve product quality and global market share and secure adequate returns.

Box 7

NESTLÉ SUPPORTS COFFEE RESEARCH

The Nestlé Research Centre in Tours, France, has pioneered research to improve coffee cultivation around the world. Working alongside partner institutes in coffee-producing countries, it has developed techniques to cultivate coffee plants that are adapted to particular environments and soils. It also conducts studies to control the diseases and pests that destroy farmers' crops and livelihoods. Working in collaboration with several coffee producing countries, Nestlé has established a collection of 250 proven high quality coffee varieties from around the world. These are offered free of charge to the countries that have participated in the project, enabling them to conduct plant improvement programmes using the best varieties for their climate and conditions. In Mexico, for example, INIFAP, an agency of the Mexican government specialised in agricultural development and partly funded by Nestlé, has set up a multiplication programme for the large-scale production of high quality and productive robusta coffee plants. These are supplied free of charge to Mexican coffee farmers, helping them to become more competitive and to produce coffees that correspond to Nestlé's factory needs. This guarantees a buyer for their harvest.

Source: Nestlé Coffee Report 2003: Faces of Coffee

³⁰ Raw Deals: Africa and World Trade, by Michael Barratt Brown and Pauline Tiffen, TNI, 1994

Box 8

**Dr Alfredo ZAMARRIPA, Coffee Researcher
INIFAP Institute, Chiapas, Mexico**

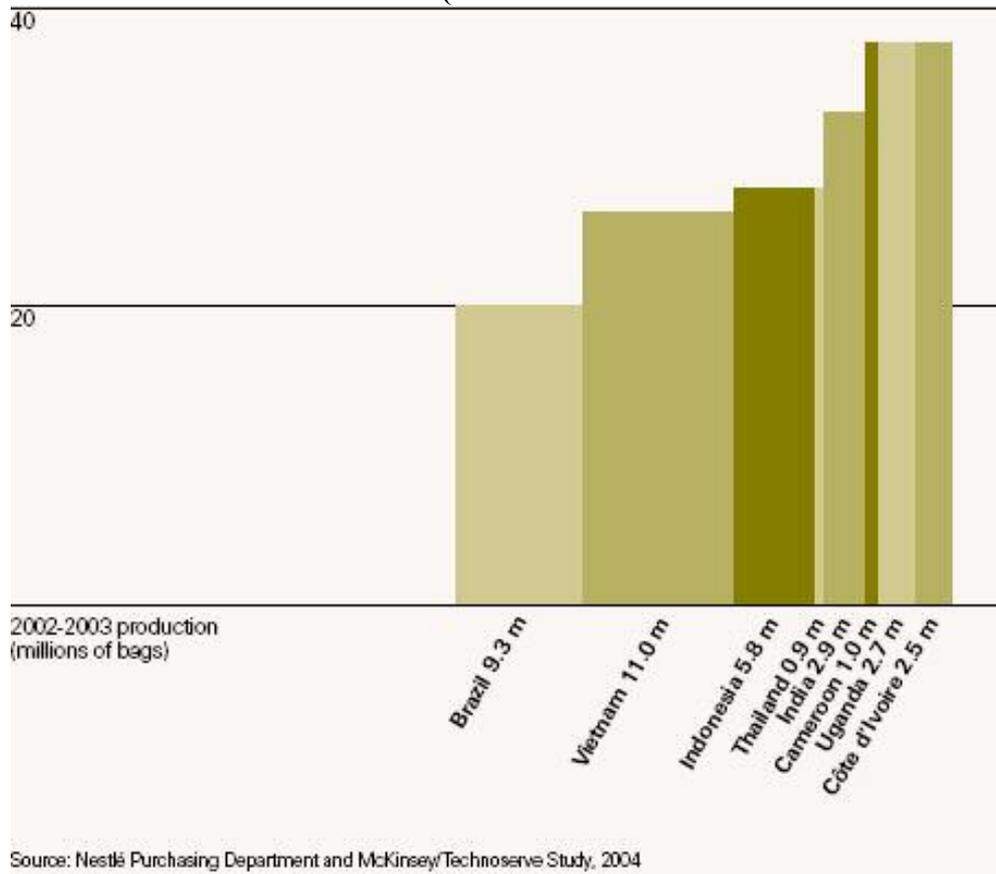
We obtained eight selected clones that have a very high industrial quality, are resistant to disease and have the ability to produce a yield four times in excess of normal production. I am a coffee farmer myself. I think that is very important. If you are just a scientist, it's possible to lose track of the full picture of the coffee cycle. But when you are a farmer yourself, and you see the problems the farmers experience, it's much, much easier to understand just what the farmer needs and how technology can support him.

Source: Nestlé Coffee Report 2003, idem

Weak S&T applications to the two crops under review in much of Africa is perhaps best illustrated by the fact that yields per hectare in Africa are, on average, much lower than in Brazil and East Asia for the two commodities, which translates into production costs being significantly higher in the African countries shown in figure 7 below than in Brazil and Asian countries. This example can easily be extended to other crops grown in Cameroon, such as maize whose average output per hectare in China is triple current productivity figures in Cameroon. These comparisons further underscore the importance of modern S&T applications to agriculture for a green revolution to break out and secure improved livelihoods for the rural poor.

Although TNI observes that Africa's predominantly small-scale farmers lack the resources of large agribusiness investors in Asia and large farms in Brazil to apply new technology, the real issue, in the case of Cameroon for example, is the inability of the national research system to transform the agricultural sector by providing the required support (continuous research work leading to more performing seedlings and efficient production techniques) to the small-scale farmers, who also exist in Asia and Latin America. Small holders account for over 80 per cent of world coffee production. Box 9 sums up the biotechnology promise for Africa's agriculture. Limited domestic research capacity could be supplemented by partnering with Brazil and South-East Asian countries producing similar commodities in the context of technical and economic cooperation among developing countries (TCDC/ECDC), which is an important policy plank of the Group of 77 and China, and of which Cameroon is a member.

**Figure 7: Average production costs for robusta coffee: 1996-2001
(US cents/1b**



Box 9**AFRICA AND THE BIOTECHNOLOGY CHALLENGE****Auguste Kouassi**

The role of biotechnology in agriculture is most promising, in particular, because it enables a quicker process of selecting and nurturing various plant species. By using cultures from cells, tissues and plants, and genetic engineering, it is possible to cultivate and disseminate plants that are more protein-rich, insect-disease-, and drought-resistant, capable of producing their own manure from atmospheric nitrogen, and capable of withstanding high-salinity soils. Scientific techniques can also contribute to reducing production costs, and conserving disappearing plant species. Results already obtained, as well as the hopes vested in current research, indicate that the application of biotechnology to agriculture may constitute one of the solutions to the crucial problem of food security in Sub-Saharan Africa.

In the humid and sub-humid zones of West and Central Africa, with the exception of the biotechnology center at Nkolbisson, Cameroon, the conditions for sustaining a scientific and technological environment necessary for the mastery and use of biotechnological tools have not been put in place by any country. In fact, there is an absence of appropriate infrastructure and specialized scientific equipment; the number of qualified scientific and technical personnel is inadequate; and the integration of basic and applied research is non-existent. Owing to the absence of a real national biotechnology program, research activities in a typical country are spread over several institutions and are very often linked to a researcher and laboratory, or are strongly influenced by bilateral cooperation ventures. Most of the countries have not designed appropriate policies to benefit from biotechnology in keeping with their needs and specific situations, and there is no single recommended policy regarding its use and development. It would thus be a tragic mistake for these countries to try and imitate the policies developed by the industrial and technologically advanced countries.

The advantage biotechnology has for the countries in these zones is that it can be developed from the biological resources of each country, and can be applied at varying levels of complexity and to varying biotechnologies on their economies so as to take the necessary measures to protect their interests. It is also necessary for them to better appraise the possibilities offered by biotechnologies so as to make choices that will match their needs and aspirations. These choices must take into account the capital available, the critical views of researchers and technicians, the development of the industrial sector, and the significance and needs of the internal and regional market, etc. Appropriate biotechnologies that are less costly, tested and certified, and easy to transfer as well as to adapt to local conditions, should be developed and adopted.

Source: Presentation at the SPAAR-sponsored Regional Workshop on Revitalizing African Agricultural Research, op. cit

5.4.3 Agricultural research networking

As noted earlier, IRAD seems to have maintained working relations with IITA which is one of 16 institutions under the Consultative Group on International Agricultural Research (CGIAR: www.cgiar.org), as well as with CIRAD whose mandate and global spread are almost similar to that of CGIAR. The latter's institutes concentrate on food crops typically grown in tropical and arid regions of the world and their outputs including publications would be of great relevance to IRAD's research programmes. For example, CGIAR's International Rice Research

Institute (IRRI: www.irri.org), based in the Philippines, and whose work is mostly focused on poor, small-scale farmers such as are predominant in Cameroon and other African countries, is credited with having contributed to the green revolution in Asia cited by the *The Economist* in one of the quotes opening this chapter. It is not clear to what extent IRAD has developed - in order to avoid re-inventing the wheel on each crop on its agenda - strong partnerships with CGIAR's institutes, besides IITA, and how rigorously such partnerships are focused on specific crops or projects.

Networking in a subregional, regional or South-South context is particularly important for pooling research capacities among countries with similar agro-ecological zones and problems, and producing similar crops, while networking with institutions in advanced countries could help with resources and equipment. More crucially, the Cameroon research establishment could work to partner more systematically with S&T institutions in Africa as well as in Asia, especially in agro/food-processing (e.g. China, India, Indonesia, Malaysia or South Korea) and Latin America (especially Brazil). For example, the regional coordination centre for Research and Development of Coarse Grains, Pulses, Roots and Tuber Crops in the Humid Tropics of Asia and the Pacific (CGPRT: www.cgprt.org), an ESCAP centre based in Indonesia, and also supported by CIRAD, promotes research, training and dissemination of information on the crops in question. The work of South Africa's National Research Foundation (NRF: www.nfr.ac.za) might also be relevant to IRAD's evolving concerns.

China has a network of applied agricultural research and training institutions each focused on an individual crop or group of crops as part of its programme of technical cooperation among developing countries (TCDC), whose work in the area of appropriate technologies applied to vegetable production and processing for example could be valuable in developing Cameroon's food processing industry. These Chinese institutions derived lessons of experience from the country's "Spark Programme" initiated in the mid-1980s to disseminate appropriate technologies in its rural areas and help farmers rely on S&T to boost productivity and rapid economic development of the rural sector. In Latin America also, Cuba has established scientific leadership in biotechnology particularly suited for agricultural expansion. More generally, crop-focused research partnerships could be forged with research and production entities in those countries shown in chapter 2 to be the leading world or regional producers of the crops of interest to Cameroon or included on IRAD's research agenda.

5.5 Agricultural extension system

Even before the lean years of economic crisis, Cameroon's agricultural research system did not manage to nurture mutually beneficial collaboration with the national production system, especially the rural farmers with few exceptions. Much of the research effort was supply-oriented and hardly driven by the end-users of research products. Various constraints facing the extension system, notably its weak and often episodic relationships with the rural community due to poor rural roads and logistical means, and the lack of effective collaboration or joint programmes with IRAD, meant that whatever improved varieties had been developed or adapted by the researchers hardly found its way into the rural farming sector, as summarized in box 6 above. Moreover, the extension system consists mostly of personnel (agronomists and technicians) with sound theoretical knowledge of a general character but with rather limited technological skills and experience in the production of individual crops or in farm husbandry.

In developing the Chede project in KMD for example, an agronomist trained at the then Agricultural University of Dschang, and among the brightest of his class, was recruited to establish a model robusta coffee farm which would set high quality standards for coffee farming in KMD, produce high-yield seedlings for the local coffee farmers and serve as training ground in best farming practices. The agronomist set out to select the “best available” seedlings from IRA’s station in Kumba. The seedlings, described as being the product of the latest research effort, were planted on 50 hectares of land. It was however discovered five years after planting that, although the trees had grown rapidly to maturity, their productivity was extremely low, much lower than the varieties local farmers had planted many years back.

It later turned out that, unknown to the agronomist, the “best available” variety he had planted in the Chede farm was not adapted and appropriate to high-altitude areas, Muambong (Chede project site) being over 1000 metres above sea level. The entire farm had to be replanted at considerable cost with a more adapted variety. Subsequently, in seeking to diversify to other crops, Chede could not find within the extension system specialists for the production of items in the fruit and vegetable range for export, since export-oriented production is more technology-intensive than producing for local consumption. Overall in KMD, the farmers lack confidence in the practical capabilities of the extension personnel, who moreover tend to demand exorbitant payments for their ill-adapted services, that is in addition to their government salaries and extension allowances.

Projects some donor agencies (World Bank, IFAD, and AfDB) have financed within the past ten years or so in Cameroon’s agricultural sector have among other objectives sought to address the problem of limited S&T capacity within the extension system. For example, the 1998 PNVRA project (agricultural extension and research programme support project) aimed inter alia to:

- Ensure availability of extension services in the remotest rural areas of the country;
- Revitalize on-farm applied research;
- Integrate research, extension services and the production system through the involvement of the three elements in on-farm diagnosis and adaptive research;
- Professionalize the extension staff through retraining programmes to guarantee high quality of service;
- Ensure greater involvement in project operations by the end-users, private sector, and NGOs.

Thus PNVRA’s approach was more or less similar to that adopted by the West Africa Rice Development Association (WARDA) in its dissemination of its “New Rice for Africa” (NERICA) as summarized in box 10 below. Both at central and provincial level, PNVRA was structured into service and subject areas (e.g. methods and norms; training and human resources; liaison with agricultural research; environment; programme monitoring; seed unit; etc). Below the provincial level were to be found teams, in each agricultural zone, of specialists such as food crops and horticulture; plant protection, tree crops; seed and breeding material; etc) supporting about 1700 agricultural chiefs of post at village level. As such PNVRA had as many as five

hierarchical and reporting layers: central, provincial, divisional, sector and village levels, almost like hierarchical ranks in the military and reflecting in a way the centralized nature of government's services already discussed in chapter 3.

Box 10

WEST AFRICA RICE DEVELOPMENT ASSOCIATION (WARDA)
(www.warda.org)

Partnership through Participatory Varietal Selection

The conventional top-down approach to technology transfer has given way in WARDA to two novel, applied and adaptive research mechanisms, which favour farmers playing active roles in the product development and spread. These approaches are: (i) the Task Force (TF) mechanisms, and (ii) farmer participatory varietal selection (PVS) trials. These approaches are assisting in early broad dissemination and adoption of NERICAs (New Rice for Africa) by national agricultural research and extension systems (NARES), development agencies and farmers in West and Central Africa.

The beginning of PVS Research in West Africa: WARDA brought participatory research to West Africa through a small project in Boundiali in Côte d'Ivoire in 1996. Farmers liked the concept of sharing responsibilities for rice research because they were able to select varieties that met their own needs. Encouraged by the results, WARDA scientists decided to take the participatory approach to all the WARDA member countries. In 1997, WARDA initiated PVS in Côte d'Ivoire, Guinea, Ghana and Togo. These initiating countries participated in early 1998 in WARDA's eight-day training workshop, the 'Participatory Rice Improvement and Gender/User Analysis' (PRIGA). Participatory varietal selection was taught to other newcomers who took the concept, and varieties to six more countries – Benin, Burkina Faso, The Gambia, Guinea-Bissau, Nigeria, and Sierra Leone.

A two-person team represented each country: a plant breeder or agronomist, and a social scientist or extension specialist. The team establishes local PVS trials to: (i) shorten the time required to move varieties onto farmers' fields; (ii) determine what varieties farmers want to grow on their own; (iii) learn what traits farmers value in varieties to use in planning varietal release and breeding objectives for future varieties; and (iv) determine gender differences in varietal selection, or how men and women differ in criteria used to select varieties for the next crops.

In April 1999, WARDA held two consecutive workshops. Graduates from the 1998 training program gathered to report on how farmers had accepted the participatory research in their respective countries during the PRIGA 1999 workshop. It is believed that almost 2000 farmers in seven countries selected new rice varieties in 1998 through participatory research, and that includes about 1300 in Guinea alone.

Source: Monty Jones and Myra Wopereis-Pura (WARDA) in Science and Technology for Development of the LDCs, Ad-Hoc Expert Group Meeting, March 2001, New York

Notwithstanding some of the results that PNVRA may have achieved on the ground in some parts of the country, which was not the case in much of the South West province and KMD in particular, the project's administrative set-up was much too cumbersome and top-heavy to be operationally efficient in achieving its objectives. As earlier noted in chapter 3 on decentralization, each administrative layer in the government's present apparatus is a drag (and often a serious one) on efficiency in the allocation and use of resources. Moreover, the designers of the project did not seem to take into account the landlocked nature of most rural communities

of the country; the project simply presumed that all such communities would be accessible, regularly, to extension services. That did not happen in KMD.

Further, in the light of Chede's experience in KMD, the project's specialist teams with some practical relevance to the farmers were the ones at the level of each agricultural zone with focus on specific crops or groups thereof. Farmers need technical support which is as integrated or synthetic as their own approach to farming. For example, a coffee farmer necessarily integrates the different specialist strands of knowledge such as seed production, plant and environmental protection, soil and water conservation, crop monitoring, post-harvest management, etc. as they concretely apply to coffee farming. These different areas of expertise may not apply and combine exactly in the same way for the production of maize, plantain, tomato, potato or cassava as they apply to coffee farming.

The foregoing suggests the need for the extension system to place considerably more emphasis on training and retraining an expanding pool of individual crop specialists (coffee, cocoa, oil palms, pineapple, vegetables, plantain, cassava, yam, cocoyam, maize, etc) who integrate the full knowledge chain required to produce each crop. Extension services in the Mounjo (Littoral Province) supporting pineapple farmers already apply this approach to some extent, which is not the case in the South West Province for example. That means training sessions should be crop-specific, encompassing all the knowledge sectors.

The ranks of subject matter specialists should be thinning while their expertise should be evolving towards more strategic levels of intervention, such as environmental protection (especially soil fertility and water conservation strategies) and biotechnological applications in the rural sector. The ranks of individual crop specialists (integrating all knowledge sectors) should be growing and gaining in S&T intensity, especially through refresher training and technical visits abroad to the countries shown in chapter 2 to be leading regional or global producers of the crops relevant to Cameroon. Under an export-oriented strategy, individual crop specialists should also be making periodic visits to foreign markets to which are exported the crops they specialise in so as to learn about product quality and packaging norms, sanitary and phytosanitary standards, tariff and non-tariff measures, etc. as may be applicable to each crop in the importing countries.

The proposed reorientation would require overhaul of the extension system. For example, subject matter specialists should fall under the responsibility of the new provincial/regional governments, and crop specialists should be stationed at the level of local governments to support rural farmers. By the same token, the curricula of agricultural colleges or agricultural training centres under MINAGRI would need to be restructured to focus more on specific crops, especially food, fruit and vegetable crops. It would seem reasonable to establish an agricultural training centre (to train technicians) at the level of each Division, for example one centre to serve three rural municipalities or a population of about 200 000. Through TCDC arrangements, the training centres could be networked (especially through periodic exchanges of students and teachers and Internet communication) with similar institutions and agricultural enterprises in other developing countries shown in chapter 2 to be leading producers of the main crops grown in Cameroon or new crops that can be developed to expand agricultural production.

5.6 Research in agricultural machinery

R&D in agricultural machinery for the rural farmers focuses on farm implements, animal traction, simple irrigation systems, and other mechanized solutions most appropriate in rural areas and different topographical contexts, and designed to increase yields and quality while also reducing drudgery of farm work and even making it entertaining. It was for that purpose that the Cameroon government established in 1973 a National Centre for Studies and Experimentation in Agricultural Mechanization (CENEEMA). However, this originally promising institution was among the very first casualties of government's financial problems in the eighties. Although no successor institution has emerged ever since, the need for mechanization of rural agriculture in the country remains as acute as ever. Box 11 summarizes a project experience in Asia. CENEEMA should be re-established and expanded as a public-private partnership initiative drawing heavily on the experiences of other developing countries, especially in Asia. The Asia-Africa cooperative framework established by the Tokyo International Conferences on African Development (TICAD) could be used to that effect.

BOX 11

REGIONAL NETWORK FOR AGRICULTURAL MACHINERY (RNAM)³¹

This project, which was supported by ESCAP, aimed to raise agricultural output and labour productivity through increased farm mechanization, and to improve the working conditions and incomes of farmers in countries participating in the project's network. For this purpose RNAM maintained close working links with close to 300 private and parapublic manufacturers of agricultural equipment within the region. Through such contacts, training workshops and publications, the project promoted the development, testing and marketing of appropriate equipment for mechanized farming by rural small holders.

The merit of this project was to seek in various ways to build a technological bridge between rural farming communities and the modern manufacturing sector of its participating countries with the implicit objective of reducing disparities in technological progress within and among countries of the region. The project additionally provides an important lesson in the application of science and technology to alleviate poverty and tedious working conditions in the rural sector. As a measure of its successful interactions with the regional economic environment, the project is estimated to have induced investments totalling US\$ 110 million mostly by private companies manufacturing agricultural equipment. Although the Inspectors could not thoroughly assess the project's impact on farmers' outputs and incomes, internal follow-up evaluations by RNAM itself indicate positive results varying from one country to another.

The reason why CENEEMA should be revived in one form or another is that farming implements in much of the rural South West for example are so rudimentary that, if the wheelbarrow is excluded, they are mostly of two kinds – a machet and a hoe, almost like 100 years ago. Tractors are generally used only by medium-size commercial farmers. Private sector companies producing agricultural machinery other than wheelbarrows and other basic tools are virtually non-existent at present. The absence of mechanized approaches to farming translates into low agricultural output, quality problems and higher unit cost of production. It also limits diversification into commercial fruit and vegetable production, which tends to be more

³¹ Extract from a UN Joint Inspection Unit report entitled: United Nations system support for science and technology in Asia and the Pacific (JIU/REP/95/7), Geneva, 1995.

technology-dependent (especially irrigation) than coffee or cocoa production for example. According to the McKinsey Quarterly Report (March 2004), world coffee cost structure has shifted mainly because of Brazil's increasing productivity thanks to its technological innovations such as mechanized harvesting and increased irrigation. As illustrated in figure 7 above, coffee production costs in Brazil are about 40 per cent lower than in Cameroon, Côte d'Ivoire or Uganda. In Cameroon, meanwhile, can a hoe and machet produce a green revolution?

5.7 Agro-processing technologies

The agro-processing industry in Cameroon is very little developed besides the breweries, which are flourishing, and a few parastatal initiatives such as CHOCOCAM or CAMSUCO. Food technology research is one of IRAD's functions. However, for financial and other reasons noted earlier, hardly much has been done to date in this vital area where the needs and potential benefits are almost limitless in terms of raising farmers' incomes, developing a local food industry, and expanding regional trade in value-added food products, especially in view of rapid urbanization trends in Africa (box 12).

While there are limits to the quantity of produce a farmer can grow on a single hectare whatever the crop or level of S&T applications, there are scientifically no such limits in principle to the types and quantity of high-value by-products that agro-processing technologies are capable of producing from a single product. For example, although in Cameroon only meat and milk are generally derived from a cow, in many industrial countries a cow can produce, besides meat and milk, over 100 by-products: from leather for a variety of uses in everyday life to different drugs for the treatment of diseases and to applications as industrial lubricants and fluids. Even by-products as diverse as cosmetics, printing ink, explosives and fertilizer are processed from a cow, and the technological possibilities have not yet been exhausted. Thus processing can increase to a considerable extent the economic value of an agricultural product. It however requires applied research work and S&T capacity, including an industrial base, as well as high-quality products, which in turn depend on advanced production methods, as noted earlier.

Box 12

IMPROVING VALUE-ADDITION TO MEET CONSUMER NEEDS IN AFRICA

Kwame Vowotor

Due to increased rural-to-urban migration and an expected rise in family incomes, urban families in keeping with existing trends, would eat more processed and/or value-added foods 25 years from now. These huge changes in African food consumption patterns would have enormous implications for the agro-food enterprises, agricultural production and food safety. These are challenges which could be met by broadening our thinking to cover research systems that satisfied both the wants and needs of farmers and consumers. Value-addition through the development of agro-food industries and delivery of post-production technologies could serve as an important cornerstone for healthy rural economies. Unfortunately, little or only fragmented attention is today paid by most governments, donor agencies, and research institutes to value-addition to deliver food from the rural to urban markets. There is the need to develop and improve dynamic partnerships between farmers and public, private and NGOs organisations that could lower the costs of agricultural production and marketing, help African agriculture compete more effectively in international markets, and, perhaps, most importantly, help the poor have access to the value-added food required for a healthy and active life.

Source: FoodAfrica, 5-9 May 2003

Author is with the Food Research Institute, Accra, Ghana

Box 13

Physically Modified Cassava Starch and its Application in Food and Non-Food Industry

Due to abundant and readily available sources, starch has been utilized in many industries based on its functional properties. It can provide an economic advantage in many applications where higher priced items are used. Starches of different sources are considerably different in their functional properties. The application of starch therefore should be conducted appropriately to receive desired products. An appreciation of improper starches can diminish the quality of final products unless their functional properties have been modified to be appropriate. The modification can also enhance starch utilization since modified starches may provide functional attributes for industry applications that native starches cannot provide.

Granule size is a characteristic property of starch that can influence starch functionality. An alteration of granule size by physical approach has been successfully accomplished in many starches including wheat, corn and potato. Starch with reduced granule sizes, after physically modified, is reported to have better functional properties such as water absorption and enzyme susceptibility. Small granule starches with a similarity in size to the lipid micelle can also be used as a potential fat substitute in food products due to an ability to provide fat-like texture or mouthfeel. Starch with small granules can also be used in other industries such as cosmetic, detergent, paper and textile.

Cassava is planted extensively in Thailand due to its ease of growth. Currently, Thailand is recognized as a significant exporter of cassava starch, chips and pellets in the world market. Around 20 million tons of cassava roots are produced annually of which 10 million tons are processed into cassava starch. Most of cassava starch is exported as a low value commodity. It is worthwhile to improve the value of cassava starch and also increase its utilization. In this study, cassava starch will be physically modified in order to reduce the granule sizes. These small granule starches can be applied appropriately in more industries including biodegradable packaging material, fat replaces in food industry and tablet production in pharmaceutical industry. By this modification, cassava starch as a low value commodity therefore can be developed to products with higher value for domestic and export markets.

Source: National Science and Technology Development Agency (The Reverse Brain Drain Project), Thailand (www.rbd.nstda.or.th).

Box 14

CASSAVA PROCESSING IN NIGERIA

Processing of agricultural products in Nigeria is as old as farming itself. In Nigeria, traditional foods processed at home or in small-scale cottage operations constitute the principal mode of utilization of cassava. Commercial livestock producers are fast adopting the use of cassava processed by-products in livestock feeding, appreciating its great potential in feed formulations. Cassava is also useful in several other industries, such as baking, and brewing but the domestic consumption of cassava products has resulted in limited availability of cassava products for industrial use.

Source: www.globalcassavastrategy.net

Box 15**DEVELOPMENT OF AGRO-PROCESSING INDUSTRY IN THAILAND****Dr Chaiwat Konjing**

Since the early 1980s, when the Joint Public-Private Sector Consultative Committee was established, actions to promote the development of agro-industries in Thailand were taken in an effort to encourage private-sector investments in agriculture and agriculture-related sub-sectors. Basically, the development of the agro-processing sector, especially the food sub-sector, can be considered as an offshoot of agricultural expansion as well as diversification. For instance, the success brought by rice exports since the end of World War II has induced a search for other crops with high export potential such as maize, sugar cane, cassava, pineapple, etc.

The rich and fertile soil together with favourable climatic conditions have made Thailand successful in producing food surpluses. As the contribution of trade to the economy has been increasingly recognized, the government and the Thai farmers are encouraged to find ways of expanding agricultural production, not only for import-substitution in food but also to generate more foreign exchange from trading food surpluses. However, the global economic depression that occurred after World War II had caused the price of food and agricultural products to fall drastically while the price of processed products increased. This was the major push factor for Thai entrepreneurs to venture into agro-processing enterprises to restore as well as increase the value-added of exported farm commodities.

The ever-growing numbers of food factories evidently demonstrate the importance of the food industry in Thailand, for which food-processing technology has been generated and developed. As of 1997, there were 9,713 commercial food-processing factories, of which 8,547 factories (88 per cent) were of small-scale category with capital investment of less than 10 million baht (US\$0.24 million). The medium and large-scale factories constituted only 9.2 and 2.8 per cent respectively. Associated with the expansion of the food-processing factories was increased employment; approximately 658,900 workers were engaged in the food-processing sector.

A variety of food products produced from these factories are distributed for both domestic consumption and export. Following the boom in commercial food exports, simple and primary processing of foods at local community levels has been stimulated. Currently, there are various groups of farmers and farm house wives who are engaged in simple food preservation and processing not only for family consumption but also for commercial purposes. These types of food processing have been supported by the government in an attempt to increase the income of farmers and employment generation in the rural areas. In fact, the promotion of rural cottage industries has been the prime objective of the government since the first national economic development plan commenced in the early 1960s. Major government support schemes to small, rural cottage industries included technical assistance through the training of workers and entrepreneurs, investment privilege granting in terms of tax reduction and low interest short-term loans specific to small, rural cottage industries.

Source: Submission by the author at the Ad-Hoc Expert Group Meeting on Science and Technology for the Development of the LDCs, 12-14 March, New York

Malaysia has been able to derive from its oil palm industry numerous by-products for food, health and industrial purposes thanks to its advanced research and processing (industrial) capacity, and that success has in turn spurred the expansion of oil palm production in the country

and raised the industrial and commercial value of the product worldwide. Thailand is moving in a similar direction with respect to cassava, as shown in box 13, while Nigeria is just beginning to glimpse the industrial uses of cassava by-products, as suggested in box 14. In Cameroon, meanwhile, cassava is used mostly as food in many different forms. Were its industrial application potential ever to be realized in the country, its local price would go up, pulling increased production, raising farmers' incomes and employment in the process and reducing poverty. In view therefore of these multiple benefits of agro-processing, it must be wondered why CDC, with close to 100 years of existence, continues to export mostly primary products or products with only limited value-added. That may be because CDC in a way exemplifies Cameroon's backwardness in agro-processing industry and ambitions. This sector, particularly food manufacturing, has to date received little emphasis in terms of domestic private-sector initiatives, government's foreign investment promotion efforts and donor encouragement.

Box 16

AGRO-PROCESSING INDUSTRY IN MALAYSIA AND THAILAND (BIS)

Both countries stand out as successful examples of both vertical and horizontal diversification. Both governments adopted a dual strategy to upgrade natural resource-based industries (such as palm oil and rubber products in Malaysia and agricultural and fish products in Thailand) and used to encourage labour-intensive manufactured exports, most notably clothing and electronics. Agriculture played a key role in the industrialisation process, making these countries a success example of Newly Agro-Industrialising Countries (NAIC). The development of traditional (e.g. rice and rubber) and high-value, export-orientated agriculture stimulated the growth of agro-industry. In the case of palm oil and rubber, Malaysia set up specialised agencies to promote production and export taxes to finance research and development investment. Both countries established EPZ and licensed bonded warehouses as a means of stimulating manufactured exports and attracting foreign investment. FDI came mostly from neighbouring Asian countries (Japan and Asian NIEs). The development of natural resource-based sectors helped both countries to cope with the economic down turn after the mid-1990s, which affected manufactures exports most severely.

Sources: Export Diversification in low-income countries: an international challenge after Doha, op. cit.

Training in food technology is provided at the University of Ngaoundéré, which is the only institution currently filling this gap in the country in the absence of any known private-sector initiatives. But the University's emphasis is on high-tech solutions not adapted to food processing needs of the rural population. Yet, as the examples described in boxes 15 and 16 suggest, value-addition or processing need not all be technologically advanced. It could start with indigenous food conservation techniques long developed in the villages, such as meat and fish smoking techniques or indigenous fermentation methods used for the production of local beverages, and then build and expand thereon for wider applications. Food processing and related equipment manufacturing or imports is one major area where government should use all available incentives to encourage local and foreign investments as one of the pillars supporting agricultural expansion. International donor agencies should also make it standard policy to include a component on food-processing capacity-building in the design of projects they finance

in the agricultural sector. None of the projects supported by the World Bank, IFAD or AfDB mentioned earlier included such an element.

5.8 Culinary science and technology

The importance of this equally neglected dimension in food S&T cannot be over-emphasized. The lost ground and opportunities to be recovered on this front are illustrated for example by the very few domestic (and rather poorly flavoured) dishes offered in the restaurant menus of most Cameroonian hotels. That is equally evident in the limited number and low quality of restaurants operated abroad by Cameroonians and Africans in general, excepting Ethiopians. Yet, a country's gastronomy, like that of the French, Italian or Chinese, can be a powerful national emblem and trademark, especially in tourism. Indeed, it is thanks to the combination of culinary arts and food technology, coupled with a training tradition in catering, that Chinese cuisine (and increasingly that of other Asian countries) has succeeded in straddling the globe – and still expanding. Using an educated guess, the economic value of the global network of Chinese restaurants must surely surpass Cameroon's current GDP.

At present in Cameroon, and with the doubtful exceptions of the Hotel and Tourism School in Ngaoundéré (ENAHT) and domestic science training at the Opportunities Industrialization College (OIC) in Buea, there is hardly any research and training in indigenous culinary skills to produce chefs able to blend culinary arts with food science, and to develop Cameroonian traditional cuisine to a modern state-of-the-art business linked to a national food security strategy and to an employment creation policy. If properly developed, Cameroon cuisine could become an important export-trade item lifting food production and farmers' incomes. Urbanization trends in the country provide yet another justification for intensifying efforts and investments in culinary S&T and training.

There are certainly opportunities on the local, regional and world markets for richly tasty African dishes. For example, thanks to culinary S&T it should be possible to “industrialize” and market widely – like the Japanese *SUSHI* - many traditional Cameroonian specialties not yet known beyond the country, such as Bakossi Nzabegen, kwankalan, koki beans, or egusi pudding, and many more waiting to be researched and developed for the domestic and export markets. Ndolè and Eru for example have still not exhausted their expansion potential, they are simply waiting to be leavened by S&T instrumentation. What it takes is applied research and marketing savvy. There is certainly work here for IRAD, and also room for private entrepreneurs willing to establish culinary research centres and schools as well as Cameroon/African restaurant chains (including fast-food outlets) supported by systematic research and training initiatives. McDonalds, which today spans the globe, started more or less the same way. Joint ventures could be sought with specialized institutions abroad offering a combination of courses, including up to University level in the U.S, on food and nutrition, scientific principles of food preparation, applied techniques of food production, functional properties of food, food quality assurance, menu and service management, etc.

5.9 The media

The Cameroonian media in general also reflects the limited awareness in the country, including in government circles, of the fundamental importance of S&T in solving development problems, improving economic and trade competitiveness, and eradicating poverty. Public and

private media channels devote very little space to S&T topics beyond news items. For example, virtually no alarm was raised in the private press about the sorry and prolonged decline described earlier of the national S&T establishment, especially its research component. With respect to the rural population, however, INADES (Institut Africain pour le Développement Economique et Social), based in Abidjan, has been active for years in several provinces of Cameroon in the dissemination of technical information to rural farmers. But its positive impact, though not known, is not likely to have been significant because of the serious physical constraints described in preceding and following sections on rural smallholders. *La Voix du Paysan* (The Peasant's Call), is a popular weekly published by a domestic NGO based in Yaoundé. It provides excellent information to the rural sector and periodically organizes conferences focused on small-scale producers. The last such conference in August 2004, attended by Chede, was devoted to food processing.

In conclusion, the S&T capacity in Cameroon is work well begun in the 1970s only for it to enter a period of prolonged recession from the mid-eighties onward. Recovery and rebuilding of the system is still to recommence on the scale required to bring it back to its previous capacity of the early 1980s. For that to happen, however, S&T may have to be included in the PRSP, during its next review, as a major investment priority for Cameroon in the light of the findings of this chapter, namely that the erosion of the country's S&T capacity has had adverse effects on its long-term development, especially in the agricultural sector, which therefore currently lacks an S&T engine. That is why the country's agricultural locomotive is not yet steaming and why its potential to deliver an agricultural miracle is still sleeping. If the engine is lacking, what about the other components: producer-support institutions and services, which constitute the battery of our locomotive?

6. PRODUCER-SUPPORT INSTITUTIONS AND SERVICES

6.1 Agricultural credit institutions

FONADER (Fonds National du développement Rural) was established in 1973 to support rural agriculture by extending credit at favourable conditions and providing subsidized inputs, especially fertilizer. Initially it managed to stimulate production by rural smallholders but not as much as had been intended for a variety of reasons, including inadequate rural infrastructure which was part of its remit. It also experienced problems recovering unsecured loans, a substantial part of which went to urban-based “farmers” with political connections. Yet another example of a well-targeted institution supporting the rural sector like CENEEMA, FONADER was dissolved in 1996 partly at the instigation of USAID which advocated liberalization of the fertilizer sub-sector (see below), and succeeded by Crédit Agricole.

Despite its name, however, Crédit Agricole hardly ever functioned as a rural farmers’ bank but rather like any other private bank in the country even though the government was one of its major shareholders. Crédit Agricole could not overcome the two well-known obstacles to the provision of financial credit to rural farmers, namely loan guarantees and high interest rates. Moreover, its resources were so mismanaged that it shut down after barely five years of existence. Thus since the demise of FONADER, Cameroonian rural farmers have been without agricultural credit which they cannot obtain from the country’s private banking sector, the latter’s collateral requirements and prohibitive interest rates being beyond the reach of the poor, particularly during the prolonged commodity price plunge.

In the absence of a rural farmers’ bank worthy of its name, some stop-gap solutions emerged in the 1990s with the support of some donor agencies as part of their project packages. These initiatives included: FIMAC (Fonds d’intervention pour les micro réalisations agricoles and communautaires); PCRD (Projet de crédit rural décentralisé); and CVECA (Caisse villageoise d’épargne et de crédit auto-géré). The problem with these programmes is that they far from cover all the Provinces and Divisions of the country and the reasons and criteria used to select eligible provinces, even as pilot experiments, are hardly communicated or known to the public. Furthermore, the very existence of these rural credit programmes is never systematically publicised through the mass media for example to the potential beneficiaries in the rural sector so much so that the programmes tend to operate at the sole discretion of government officials in charge at the different levels of government. Besides, the administrative labyrinth that must be understood to access credit is another drawback to these partial solutions.

The programmes were established to support rural farmers; but there is no system of accountability to the farmers for the use of programme resources. Besides the initiatives outlined above, localised private savings and credit cooperatives have been emerging spontaneously throughout the country for some time. But it is hard to tell which of these financial cooperatives exists specifically to finance rural agriculture, besides the fact that they are of widely variable financial strength and credibility. The PRSP provides for a national micro-finance programme designed to improve the rural farmers’ access to micro-finance institutions and to strengthen the capacity of these institutions. It also proposes to implement mechanisms (still to be defined) for the provision of medium to long-term support to farmers and agricultural investments. But these are plans and they are in the future, and probably a distant future for all districts of the country.

It can therefore be safely concluded that Cameroon currently lacks a national policy and credible institution for meeting the acute need for funding rural agriculture. Yet, consistent with high-profile pronouncements on the central importance of agriculture, the government could develop a deliberately coordinated approach to filling the gap left by the dissolution of FONADER and Crédit Agricole, firstly by striving to achieve unity of policy and purpose at the level of government Ministries directly concerned, especially MINFI, MINAGRI and MINEPIA, and secondly by bringing the private banking community and donor organizations into a partnership with government to back the establishment of an agricultural bank worthy of the name, with a branch in each rural district (not micro-finance solutions) for poor rural farmers and jobs-creating commercial agricultural ventures in the rural areas. In the absence of such an initiative it would be difficult to believe that government has placed the rural farmer at the centre and front of its national development concerns.

6.2 Seed production and distribution

Under present government policy advocated by the donor community, the seed sector is being liberalized. A regulatory regime remains to be established defining the respective responsibilities of MINAGRI, IRAD, and the private sector, which is expected to take over the role of seed production and distribution. But then the capacity of the private sector to play this role effectively has not yet been established or assessed. With respect to export crops, that role is already being played by major agribusiness concerns in the country such as CDC for rubber trees or PAMOL for pre-germinated nuts. The Coffee (robusta) and Cocoa Seedlings Project (CCSP) produces and distributes planting materials for the two crops at Provincial level, while UCCAO (Union of coffee cooperatives in the Western province) produces Arabica coffee seeds. Thus the seed sector for export crops seems pretty well organized at present although, as noted in the previous chapter, it is difficult to ascertain any technological improvements introduced through continuous research work in this sector for export commodities.

In contrast to the above, the seed sector for food crops has remained in disarray since MIDEVIV (Mission de développement des cultures vivrières, maraîchères et fruitières), established in 1973, was abolished in 1990 - yet another institutional casualty of government's financial distress since the mid-eighties. MIDEVIV operated three units: North Food Crops Seed Project; South Food Crops Seed Project; and Coffee/Cocoa Seedlings Project, which was the only unit to survive the collapse of MIDEVIV. These projects were so heavily dependent on foreign aid that their funding structure did not seem to reflect the strategic importance government assigned or was supposed to assign to the sector. A national seed policy and plan (for food crops) was prepared in 1988 followed by the creation of a National Seed Council (NCS) to superintend policy implementation. But these commendable initiatives remained stillborn and the new seed policy apparently prepared in 1995 and not yet fully operational signalled government's intent to withdraw from the sector and only retain regulatory responsibilities.

Summing up the situation of the food crops seed sector in 1997, the Director of agricultural production in MINAGRI had the following to say:

- The National Seed Council, as a consultative body, and its permanent secretariat, is still not functional;
- There is no seed legislation and regulation;

- The centres of seed multiplication of the defunct MIDEVIV have been abandoned together with all seed production and processing equipment;
- Pioneer Agro-Genetic Cameroon (PAC-SA) has discontinued seed production since 1993;
- There is a real scarcity of high quality seeds in the country;
- There is uncontrolled importation of virtually all the stock of exotic vegetable seeds.³²

While privatisation of the sector has been adopted in principle, the domestic private sector seed industry remains in its infancy, and is still to move into capacity and speed. Currently, there are no more than a handful of known seed producers in the country and it is not clear who certifies the seeds they produce, import and sell to farmers. Examples include: CAPYSEM (Complexe agro-pastoral de Yaoundé pour la production des semences) in Central Province ; PRO-AGRI in Littoral Province ; and SOCASEM (Société camerounaise de semences) in Western Province. Chede, which also has seed production and distribution as one of its objectives, has established in partnership with its sister organization (Chede-Muafcoop) a research and seed multiplication unit (RSM) in Muambong to serve high altitude areas. In conclusion, the seed sector is at present no better organized than the agricultural credit sector.

6.3 Fertilizer and other inputs

As already noted, FONADER while in existence was responsible for importing and distributing fertilizer and other inputs to the farmers, mostly through Provincial cooperative unions. In the wake of the privatisation of the public sector attendant upon structural adjustment programmes underway since the mid-1980s, this sector was also liberalized, like the seed sector. USAID was one of the ardent advocates of this trend and it financed the process under a project entitled Fertilizer Sub-Sector Reform Program (FSSRP), implemented from 1987 to 1993. According to USAID, fertilizer import and distribution by FONADER involved about nine government Ministries or agencies resulting in high costs, long delays and multiple opportunities for corruption. Delivery schedules were estimated at between 15 and 24 months. For these reasons USAID initiated FSSRP to assist the government in privatising the operation and phasing out related government subsidies to the farmers who benefited from FONADER's fertilizer programme.

To sweeten the liberalization process, the project established a credit fund whose resources were accessible through local commercial banks to private-sector institutions importing and distributing fertilizer. However, the cruel irony of this project was that, while its aim was to eliminate government subsidies to poor rural farmers, it actually ended up subsidizing commercial banks so as to motivate them to lend at interest rates affordable by private fertilizer importers. With government subsidies gone and sector liberalized, fertilizer prices at retail points

³² Extracted from a presentation by Mr.J. Elang, Director of Agricultural Production, MINAGRI, at an FAO International Workshop on Seed Security for Food Security, 30 November - 1 December 1997, Florence, Italy,

spiralled out of control. This was during the export commodity crisis which persists to this day, leaving the farmers with no margin to purchase any inputs, including fertilizer. Fully privatized like the others, this sub-sector will by all indications be dominated by a few major international firms such as Rhône Poulenc (agrochemical unit) and Hydrochem,³³ whose vertical integration and financial muscle will simply browbeat domestic competitors. The question now is which will override the other: government's poverty-alleviation objective in the rural sector or the profit-making objective of private companies?

7. PRODUCE MARKETING

Box 17

FAMINE IN ETHIOPIA : WHEN MARKETS FAIL EVERYBODY LOSES

Eleni Gabre-Madhin

Two-thirds of Ethiopian traders cannot get bank loans. Only 6 per cent own a vehicle, and fewer than half have a telephone or permanent storage facilities. Most traders have not completed high school and lack formal business training. Ethiopia has few and very poor roads and virtually no telecommunications. Traders and farmers do not have public information on grain prices around the country. They have no way to know the quality of the grain they buy without inspecting it themselves. There is no commercial legal system to enforce contracts, which are mostly verbal. Ethiopia's food distribution operates much like a flea market. To carry out a sale, traders must physically bring their grain to the market, buyers must be physically present to inspect the grain, and the sale is strictly in cash terms. There are no long-distance orders, no deliveries at a future time, no sophisticated contracting.

Only a quarter of food produced ever reaches the market. Ethiopian farmers receive a mere one-third of the final price, compared with Asian farmers who receive 70 to 80 per cent. The market is also very risky. Abdu Awol, whom I met at the western region of Wollega, is one of the rare traders who has attempted a long-distance sale. He took his grain to northern Ethiopia, where he heard that demand and prices were higher. Because of poor roads, it took him two and a half weeks to transport his grain 900 km, and many of his sacks burst along the way. He was stopped at least 10 times by local officials whom he had to bribe. Once he arrived, he couldn't find a trustworthy buyer. In the end, he sold at a loss and never tried again.

When markets fail everybody loses, from bankrupt farmers to starving consumers. To make markets work, the government and its donors need to get serious about supporting the private sector, investing in roads and telecommunications, and putting in place institutions to deliver financing, information and legal enforcement.

Source: International Herald Tribune, June 17, 2003

³³ Under the PNVRA project, the government signed agreements with these two companies, among others, for the supply of fertilizer and chemicals to farmers, but it is not clear if these agreements provide them with exclusive supply rights or if price controls have been built into the agreements.

7.1 The Problem

Marketing is also a producer-support service, but in view of its importance in the context of our strategy, it is covered separately in this chapter. Overall, agricultural and rural development projects implemented to date in Cameroon, including those funded by highly reputable international donors like the World Bank, IFAD or AfDB, tend to assign obscure significance to the commercial dimension of agricultural production, and when they do the implicit objective is for local sales, level at which margins are thinnest and prices tend to fall when all farmers must sell locally for lack of alternative market outlets. The Ethiopian case outlined in box 17 suggests this problem is common in Africa. For example, a review of appraisal documents of some projects financed in the past ten years in Cameroon by the World Bank and AfDB reveals that none of the projects integrated the produce marketing function and related structures such as companies, cooperatives or individual produce merchants into project design strategies to an extent that raised the importance of produce marketing to the same level as the production function.

The PNVRA project, previously mentioned, came pretty close to target (but not exactly on target) by including a component on “*support to farmers’ organizations and linkages with the private sector*” among the seven services set up at central level to manage the project, as well as a component on “*support to farmers’ groups and market linkages development*” as one of the project’s nine management units at Provincial level. However, *market linkages development* disappeared at lower, more concrete layers of producer support. The omission of emphasis on marketing (as on food processing as noted in the previous chapter) was also reflected in the fact that the Cameroon Ministry of Industrial and Commercial Development (MINDIC) was not represented on the project’s steering committee.

The same observation applies to AfDB’s financed rural and agricultural development projects in the South West Province. The Integrated Rural Development Project (IRDP/SOWEDA) for the South West, implemented in the 1990s, barely had a clearly visible and budgeted marketing component. Similarly, the successor project (Rumpi Area Participatory Development Project), just about to commence, has a Project Steering Committee (PSC), which also does not include a representative of MINDIC, as well as a Project Implementation Team (PIT), which includes neither a food technologist nor a marketing expert. Yet all the projects share the objective of increasing rural agricultural output beyond subsistence requirements.

Another relevant example is provided by MINAGRI’s methodological guidelines for designing projects for the Heavily-Indebted Poor Countries (HIPC) scheme focused on poverty alleviation in the rural areas. The guidelines place no emphasis whatsoever on produce marketing and some MINAGRI agronomists³⁴ handling HIPC project submissions tended to doubt the relevance of the marketing function to rural poverty alleviation. Such lack of awareness of the importance of agricultural marketing is all the more surprising since it is common knowledge that successful marketing stimulates higher levels of production and not vice-versa. What would be the purpose of doubling output without the prospect and possibility of efficient and profitable marketing by professional institutions with the necessary commercial acumen, logistics, market information and handling expertise?

³⁴ This experience relates to the author’s exchange of views on the subject with MINAGRI officials during processing of Chede-Muafcoop’s submission to the HIPC Committee in November 2003.

7.2 The centrality of marketing to production

All our strategy components examined so far (from decentralization to fertilizer imports and distribution) entail costs. While marketing also carries costs, it is the only function or strategy component that produces revenues to cover all the costs associated with the other components, and yield a surplus that justifies and drives more production. However, marketing not only generates profits; it can also incur losses if not professionally organized and staffed and depending more importantly on the quality of the other pillars of our strategy. Such losses would impact negatively on rural production and the nation's export earnings, depriving it of the means to continue strengthening its factor endowment. Thus sustained success on the commercial front fuels ever more output and earnings and sustained national capacity building, while failure depresses production, farmers' incomes and checks overall development momentum. That underlines the organic linkage between the production and marketing functions.

That linkage becomes even more vital to production when marketing is understood as a feedback medium to production, enabling the farmers to continually improve the quality of their product offerings so as to conform to consumer preferences and standards, as may be dictated by local, regional or international markets. Thus by regularly providing the farmers with specifications on product quality and presentation necessary to beat competition and generate good earnings, marketing institutions serve as vectors of technology transfer and innovation to the production level, and thereby help raise production standards. Moreover, only a specialized marketing business, and not the rural farmer, possesses the market intelligence for identifying in which parts of the country or region or foreign market a particular product can generate a windfall profit, or which food manufacturers in the country, region or abroad need which products, in what quantities and frequency.

Furthermore, marketing is the nervous point of intersection (the node) of all the other components examined so far in our strategy. That is to say the quality and efficiency of each of the elements in question are felt directly or indirectly on the marketing front. For example, if administrative and other producer-support services are not within farmers' proximity of access because of limited decentralization to the local level, the quality and efficiency of production are affected because of delayed inputs, which in turn would affect product quality, its timely distribution to the market, and its price. Poor infrastructure hampers produce evacuation and marketing efficiency while increasing costs, reducing cost-competitiveness, margins and earnings for producers and marketers. As earlier noted in chapter 4, shipping costs from Africa are 30 per cent higher for plywood and 70 per cent for tuna than from Asia to Europe because of the region's infrastructure deficits. No marketing genius would make a profit in such circumstances. We have also already observed how limited S&T applications to agriculture in Africa negatively impact on quality, yields and costs, making African produce less competitive (more difficult to sell) on the global market. Therefore, it is at marketing level that is felt the cumulative impact, positive or negative, of all the other elements.

Using our analogy of an agricultural locomotive, marketing would be its headlights, drive-wheel and gearbox combined. The headlights can spot opportunities and risks at a distance; the drive-wheel guides direction to profitable market segments and product sectors, avoiding risks and targeting opportunities, and the gearbox serves to signal a faster or slower pace of production as may be dictated by market conditions. Rural producers will raise their incomes and rise out of poverty only on condition that all the elements of our strategy are in place and operating efficiently, with expert commercial institutions interfacing between the farmers on the

one hand and local, regional and export markets, on the other. In short, then, agricultural marketing is epicentral to agricultural development and expansion. One of the many reasons why Cameroon's agricultural development has either stalled or not performed to the amplitude of its potential, as concluded in chapter 2, has been the absence of an integrated approach to agricultural development, as demonstrated herein, and that has been worsened, especially in the South West Province, by the lack of expert marketing institutions supporting rural farmers.

7.3 History of produce marketing

Historically, the organization of produce marketing in the country, in support of rural farmers, was exclusively for export crops, meaning coffee and cocoa in the South West Province. The apex organization was the National Produce Marketing Board (NPMB), which operated a commodity price stabilization mechanism, and worked with farmers' cooperatives in the different provinces. While farmers were at least guaranteed stable prices, NPMB itself did not function efficiently; its resources were raided not infrequently by government or top management. Liberalization of the commodity sector in the mid-eighties led to a restructuring of NPMB, which became the National Coffee and Cocoa Board (NCCB) but with no commodity marketing responsibilities. Produce cooperatives also either shut down completely or went into an indefinite comma. It is noteworthy that the operations of these cooperatives were limited exclusively to coffee and cocoa so much so that the very concept of a farmers' cooperative in much of the South West and KMD in particular became synonymous with the purchase and selling of these two commodities.

Chede-Muafcoop, which came into being as other cooperatives in KMD folded up or became dormant, was the farmers' organization in the Division with an active interest in diversification of production and the local, regional and export marketing of products other than coffee and cocoa, even as it promoted a coffee quality improvement campaign using its coffee demonstration farm in Muambong as a model. The objective of this campaign was to raise coffee quality to the standard which Max Havelaar³⁵ had determined would make the cooperative eligible for certification as member of the international fair-trade network. Besides coffee, however, it proved somewhat difficult to structure and focus the cooperative on the marketing of food crops because these crops had previously never been identified with the farmers cooperative movement in the Division, and probably so in the rest of the South West Province. However, in Muambong at least, diversification to commercial farming is taking hold as cooperative members move increasingly into the production of other crops besides coffee and cocoa, such as pepper and passion fruit.

7.4 Domestic marketing

Local marketing is handled by individual merchants both for export commodities and food crops. Local prices payable for coffee and cocoa are regularly published in local newspapers and generally follow price fluctuations on the world market, but the actual farm-gate prices the merchants pay to the farmers may be inferior to published prices, particularly at times when farmers are in dire need of cash for pure survival. Between the farmer and exporter, there may be as many as three middle market layers, with the farmer being in the most disadvantaged and helpless situation. Current coffee prices in particular barely meet production costs and farmers'

³⁵ Following a visit to Muambong in 1997 by a representative of Max Havelaar, Utrecht, The Netherlands.

earnings hardly cover their social needs. For most rural communities profitable diversification to other crops is hampered by very poor or absent farm to market roads. Consequently, the only present viable option for relieving the crushing poverty of rural farm households is direct state intervention to raise and stabilise domestic export commodity prices, as argued in chapter 1.

Marketing of food crops is similarly disorganized and negatively affected by the poor state of the other strategy pillars examined so far, especially rural roads. At present, the local distribution of these items is no more profitable to the farmers than their export crops. That is especially the case for farmers in virtually landlocked areas of the South West Province where the food merchants scarcely venture to, and when they do, they dictate miserable take-or-leave prices to the farmers in the absence of competition. Farmers' groups in the Province would be best advised to get better organized around the marketing of their crops within Cameroon and in the sub-region, switching the cooperative culture developed in the past for coffee and cocoa to food crops including fruit and vegetables, but even then serious produce evacuation bottlenecks will continue to strangle rural agriculture in much of the country in the absence of a nation-wide rural road system, as suggested in chapter 4.

Even with adequate rural road infrastructure, however, food crops are more difficult to trade in than coffee and cocoa since they are much more perishable, and there are no cooling facilities or cold chain in the villages. Moreover, their profitable marketing within the country and sub-region requires a good and regularly updated knowledge of the market and its different segments. There can be major price differences from one rural locality and urban centre to another, and from one season to the next. Keeping track of which Province or Division is producing what item, in what quantity and season may not be easy, but is absolutely necessary for commercial planning. Local market research to guide the profitable distribution of food crops in the country is yet another important dimension of the marketing challenge, an area in which Chede is building up expertise, partly prompted by the realization of the need to intensify market studies for each food item and also move rapidly into food processing in order to increase the profitability of these crops. Nevertheless, the troubling question is whether it is realistic to aim at the regional or even more difficult global market with the present constraints noted so far on domestic food trade. In other words, if produce from Bangem cannot be sold profitably in Tombel, barely 30 km apart in the same rural community, how can the same produce be sold profitably in Paris or London, some 6 000 km away?

7.5 Food marketing within the CEMAC sub-region

Cameroon is one of the very few members of the Central African Economic and Monetary Community (CEMAC), which combines long political stability and peace with significant natural resource endowment, as earlier discussed in chapter 2. The country has the potential to serve as break basket for the other members mostly torn by or recovering from political strife. Cameroon is also geographically well-situated to supply food commodities to non-CEMAC countries like Angola and Democratic Republic of the Congo which are in the process of reconstruction, including the rehabilitation of their agricultural systems, and whose populations essentially depend for their daily diet on the same food crops consumed in Cameroon.

Unfortunately, however, the same negative factors reviewed so far, which have stunted the country's agricultural expansion, have also constrained its sub-regional role as major food provider. While Cameroonian food merchants do indeed supply to neighbouring countries and more particularly to Gabon and Equatorial Guinea, the intensity of sub-regional food trade is

much lower than it could have been had all or most of the conditions required for agricultural expansion been fulfilled. For example, ECA statistics measuring the shares of intra-community food exports and imports by regional economic community from 1994 to 1999 ranked CEMAC at the very bottom of 12 sub-regional economic groupings in the level of inter-country food trade.³⁶

It should be added, moreover, that practically all CEMAC member states share, and probably to a greater extent, Cameroon's strategic handicaps to agricultural expansion. Furthermore, of all the sub-regions of the continent, from North to South and East to West, the CEMAC sub-region holds the African record of being the least developed in terms of inter-country communication infrastructure (road, rail, air, and maritime transport modes, and telephone and postal services), a surprising record indeed considering forty years of the existence of UDEAC (Union Douanière des Etats de l'Afrique Centrale), CEMAC's predecessor established in 1964 to promote and build economic integration amongst its six members (Cameroon, Central African Republic, Chad, Equatorial Guinea, Gabon and Republic of Congo (Brazzaville)). That dismal scorecard should also be viewed against the backdrop of the first and second United Nations Transport and Communication Decades in Africa (UNTACDA I & II), spanning twenty years from 1980 to 2000, which required African countries to integrate at sub-regional level their national transport and communication infrastructures in order to accelerate the economic and trade integration of the continent.

Because of the above, and despite the fact that the CEMAC countries conveniently share the same CFA currency, agricultural trade within the sub-region remains far below its potential. However, even if adequate inter-country infrastructure was in place, food trade might still not expand as much as it would be desirable without significant investments in food processing and value-addition to overcome the limitations and low-value end of trade in perishable fresh produce. As can be seen, therefore, Cameroon's serious domestic constraints analysed in the preceding chapters are further compounded by equally severe similar impediments within each of CEMAC's member states and inter-se, to the point where expansion of food trade within CEMAC is currently virtually impossible, even though member states concerned have recognized the merits of a common agricultural development strategy and the need for an inter-country road network³⁷ to make such a strategy feasible.

As a result, countries of the sub-region use a significant portion of their foreign reserves to import food from abroad³⁸, whereas the same resources could have been applied more judiciously to developing sub-regional transport and communication networks as well as inter-country food security systems. Limited sub-regional food marketing channels additionally have the negative chain effect of limiting food production and food processing for commercial purposes beyond the domestic market, and of depriving the rural poor of broader commercial opportunities to lift themselves out of poverty. There is also the fact that local marketing institutions and individual food merchants cannot sufficiently sharpen their capacity to export abroad since a firm base and success in sub-regional and regional trade is often the necessary stepping-stone to the vastly greater challenge of exporting to global markets.

³⁶ Assessing Regional Integration in Africa, ECA Policy Research Report, statistical annex, Economic Commission for Africa, Addis Ababa, 2004.

³⁷ The European Union seems committed to finance the construction of such a road network under the Cotonou Agreement.

³⁸ According to the PRSP, Cameroon's cereal imports increased by a factor of 10 between 1971 and 1998, while imports per capita increased from 7.2/kg to 24/kg during the same period; and domestic cereal production per capita declined from 157/kg to 85/kg. These declines can be attributed partly to the S&T deficit in the agricultural sector noted in chapter 5.

7.6 Export marketing

7.6.1 Supply side constraints

Supply-side constraints include all the dimensions of our strategy reviewed up to now, that is limited decentralization to the local level; grossly inadequate rural transport infrastructure; weak S&T capacity to drive low-cost and high-quality agricultural production; scarce and disorganized producer-support services; and (in this chapter) just a handful of producer organizations with experience in export marketing. These factors negatively reinforce one another in the export chain, creating little less than a crisis for those Cameroonians brave enough to want to engage the global market and generate foreign exchange for their country. To that

Box 18

COST (C.I.F) OF PINEAPPLE EXPORTS FROM DOUALA

SDV CAMEROUN <i>Air Service</i>		PROGRAMAT	
B.P. 280 DOUALA - CAMEROUN TEL. (237) 42 24 83 - Fax (237) 42 24 13 (237) 42 24 80 - TELECOM 8987		1 ^{ère} COPIE	
YAOUMÉ: S.P. 38 - TEL: (237) 22 07 68 GAROUA: B.P. 512 - TEL: (237) 27 27 77		DOUALA LR 15/16/2002	
288 CLATIONS ANANAS 3.620 KGS		SOTRALEV ROISSY P/O COMMERCIAL FRUITS	
BREVETÉ DE MARQUE			
DEBOUT			
PRET ARRIVE		1.888.780	
DOUANE		3.350	
CERT. PHYTOSANITAIRE		50.000	
S.U.R.L.		1.000	
TIMBRE		1.000	
TOTAL DEBOUTS		1.908.090	
INTERVENTIONS			
P.F.D.		7.260	
C.S. DEBOUTS		28.621	
INTERVENTIONS		108.600	
TOTAL INTERVENTIONS		144.481	
TOTAL A VOTRE DEBIT		2.052.571	
Boilore			
BOULEVARD DE LA LIBERATION - DOUALA	B.P. 885 DOUALA	BOULEVARD DE LA LIBERATION - DOUALA	B.P. 885 DOUALA
TELEPHONE (237) 42 24 83	TELEPHONE (237) 42 24 83	TELEPHONE (237) 42 24 83	TELEPHONE (237) 42 24 83
FAX (237) 42 24 13	FAX (237) 42 24 13	FAX (237) 42 24 13	FAX (237) 42 24 13
TELECOM 8987	TELECOM 8987	TELECOM 8987	TELECOM 8987

should be added relatively high maritime and air freight charges from Cameroon, typical of much of Sub-Saharan Africa, high cost of packaging materials (especially cartons produced only by one firm in Douala), and an overall inefficient business environment characterized by petty corruption, excessive administration of export operations, and legal as well as illegal export taxes of all kinds. These problems tend to penalize exporters out of competition, if not out of business entirely, well before they confront the demand-side challenges of global trade. Any surprise, then, that it is so much more costly to export tuna out of Africa than from elsewhere on the globe? But the same applies to virtually all other items.

Box 18 exhibits the cost (C.I.F) structure of a Chede pineapple shipment (3,620 kg) to Commercial Fruits SA, its French customer, on 15 June 2002, shipment handled by SDV at Douala airport. As can be seen, there are eight different export cost items, bringing the unit C.I.F cost to CFA 567/kg. This charge can be considered low because the shipment was carried by Cameroon Airlines which in 2002 offered to Cameroonian exporters airfreight rates about 15 per cent lower than rates practised by the other airline companies landing at Douala airport. But the cost does not include other fees paid directly by Chede for cargo-space reservation and “administrative formalities” which can be significant to be doubly certain that the goods will indeed be carried whatever the number of exporters struggling for cargo space. Trucking the produce from Loum to Douala successfully on time for loading requires the driver to bribe his way swiftly through as many as five police or military checkpoints, without which the driver can spend hours haggling with the police at each barrier, with the near certainty that his perishable produce will miss the reserved flight. More details will be supplied on this particular shipment in the next section.

Major agribusiness concerns in the country (banana, palm oil, cotton, tea, rubber, etc) are generally not subject to the same constraints as individual or producer group exporters. The big plantation firms are more or less self-contained, have no problems with produce evacuation like the rural farmers since they are generally located along express ways and manage their own internal plantation roads. They also have their own S&T research facilities and are self-provisioning in terms of credit and inputs. Moreover, they ship by sea and maintain vertical links with global distribution networks. Consequently, they operate in a Cameroon supply-side world entirely different from that experienced by the rural farmers and their export-oriented organizations. With the exception of cotton and palm oil, smallholders are not engaged in the production of the items covered by the big firms and thus maintain few or no linkages with the plantation industries for export marketing purposes.

Besides individual exporters and small and medium-size enterprises which buy from farmers to export abroad, only a handful of farmers’ organizations in the country, including Chede, have direct trade links to the global market. Most cooperatives in the South West Province are still organized around coffee and cocoa, which they sell to middlemen or to certified exporters based in Douala. The cooperatives generally need to be strengthened considerably to be able to export coffee and cocoa directly to foreign markets since this area requires handling and market risk management expertise, logistics, capital and foreign market information, all of which are currently beyond the reach of most producer organizations in the country. The best option for the cooperatives would be to pool their resources into one or two organizations specializing only in commodity exports and having the necessary critical mass and economies of scale as well as resources needed for the export management of these two crops. The entities would be similar to the defunct state produce marketing board, the important difference being that they would be managed by experts appointed directly by the farmers themselves and working only to advance producers’ interests.

A project presently being developed by the government with the support of the International Trade Centre (ITC: www.intracen.org) under its Joint Integrated Technical Assistance Programme (JITAP), further discussed below, will no doubt contribute to raising government's awareness of the importance of building the capacity of producer groups to conduct export trade. The miserable farm-gate prices paid by middlemen to the farmers for these two products since the Produce Marketing Board was dismantled are having a negative impact on product quality – farmers cannot properly maintain their farms for lack of a comfortable profit margin - and on Cameroon's international commercial image and trademark. Product quality considerations have moved to the forefront of international commodity trade, particularly with respect to coffee.

Because of current oversupply of the world market, coffee traders are focusing on the finest quality on offer, sometimes called “specialty coffee”, and this trend hardly favours African producers with collapsing incomes and rudimentary farming methods. Organic coffee holds some promise, but its present share of world production is insignificant. The international fairtrade movement, which continues to gain favour with European consumers for example, is yet another option. But it also provides no magic solution to the glut of robusta coffee, mostly produced in Cameroon, on the world market. In the light of these facts, it would be in the best interest of the nation for the government to intervene in raising producer earnings, as earlier suggested in chapter 1.

One critical sector of opportunity which Cameroon has neglected needlessly and for much too long is that of fresh produce (fruit and vegetable) exports for foreign exchange earnings and poverty alleviation, taking advantage of the expanding demand for these items in Europe in particular, as tracked in COLEACP market data. This a sector in which North African countries, especially Egypt and Morocco, as well as Kenya, Côte d'Ivoire and South Africa, and increasingly Senegal, are reaping handsome benefits. Yet, as found in chapter 2, Cameroon has an ideally diversified agro-ecological system to become a major producer of fruits and vegetables for the African and world markets. The country's premium arable land is dominated by traditional export crops reviewed earlier with comparatively low technology inputs and low or declining global market value. By contrast, commercial or industrial production of fruits and vegetables for local consumption and export is more technology-intensive and generates much more revenue annually than coffee or cocoa for example. Additionally, it offers more opportunities for pre-export value-addition. These opportunities have been noted in the PRSP and independent studies assessing Cameroon's export diversification potential.

In view of the foregoing, it is surprising that the fresh produce sector has been left to the courageous ingenuity of a few individual merchants and small-scale export enterprises, mostly concentrated in the Littoral Province, who buy from farmers to export to the Middle East and Europe. Besides these isolated initiatives, the fruit and vegetable export sector at present receives no traction or stimulus from government. Also, as observed earlier, farmers' cooperatives remain obsessively focused on the traditional cash crops, particularly in the South West Province. Indeed, Chede is the only known South West farmers' organization with experience (of over ten years) in the export of fresh produce, especially pineapple. Various attempts to organise this sector culminated in the creation of AGROCOM (Agriculture and Commercialisation) in the mid-1990s by fresh produce exporters. Based in Douala, AGROCOM was originally a promising fresh produce exporters' association (which excluded traditional export crops from its mandate) and financially supported by PDEA (Projet de Développement des Exportations Agricoles) funded by the Canadian government. Although still in nominal existence, AGROCOM failed to

organise anything in the fresh produce sector or to raise government's awareness of the economic importance of the sector for small holders.

Nevertheless, it must be acknowledged that, even if AGROCOM had been successful in promoting fresh produce exports, diversification by the majority of rural farmers to the growing of these items for export would have still been inhibited by all or most of the supply-side constraints examined earlier. Besides fruit and vegetables, only very limited quantities of local food items (plantain, cassava, yam, smoked fish, etc.) are exported abroad at present in view of the narrow, though gradually growing, "ethnic market" for such goods in Europe. However, with increased value-addition, and as demonstrated by Thailand's example with respect to cassava, food crops could also be processed into valuable export commodities. But that opportunity is not yet available to Cameroonian farmers and exporters.

7.6.2 Demand-side challenges

One of the most difficult psychological challenges Cameroonian and other African exporters face on the world market is that of poor business reputation, as adjudged by foreign trading partners, who also are keenly aware of the various and serious constraints facing small-scale African exporters and affecting the quality and costs of their products. That also concerns the long-term reliability of the supply chain of African products. Numerous conflicts on the continent and the widespread negative impressions about the region's political misrule and even the HIV-AIDS pandemic pile on these negative perceptions. As noted by the Transnational Institute: "*The reputed dishonesty and unreliability of all but a few African trading counterparts were also commonly cited as a reason for steering clear. A London coffee buyer said, for example, we do not buy direct from Africa. It means having to take a double cover because of delays and unreliability.*"³⁹ This means supply-side constraints impact directly and negatively on the demand side of the marketing equation.

³⁹ Raw Deals: Africa and World Trade, op. cit.

Box 19
Pineapple export sales report

DOSSIER N° 4438

COMMERCIAL FRUITS
3, rue de la Corderie
cote 330
94586 RUNGIS CEDEX

12466	ANANAS A2	148	CAYENNE	A2	1	CHEDE
DATE	COLIS	PK	KILOS			
13/06/2002	148.00	1.800				
VENTES	148.00	1.800				
STOCK	0.00					
12467	ANANAS B3	28	CAYENNE	B3	1	CHEDE
DATE	COLIS	PK	KILOS			
13/06/2002	28.00	1.800				
VENTES	28.00	1.800				
STOCK	0.00					
12468	ANANAS B4	15	CAYENNE	B4	1	CHEDE
DATE	COLIS	PK	KILOS			
13/06/2002	15.00	1.800				
VENTES	15.00	1.800				
STOCK	0.00					
12477	BANANE PLANT	4	PLANTAIN		1	CHEDE
DATE	COLIS	PK	COLIS			
13/06/2002	4.00	0.000				
VENTES	4.00	0.000				
STOCK	0.00					
12478	PIMENT FORT	2			1	CHEDE
DATE	COLIS	PK	COLIS			
13/06/2002	2.00	0.000				
VENTES	2.00	0.000				
STOCK	0.00					

Proche de la mission à améliorer

on these markets. Moreover, in the fresh produce business, probably the least regulated under international commercial law, there are generally no written contracts between exporters and importers, no letters of credit, hardly any pre-agreed sharing of commercial risks between exporters and importers, and with very few exceptions no pre-financing of exports by the importers – since they lack confidence in African businessmen.

It is poor African exporters, with no bank credit, who must do the risky pre-financing by having to ship usually on F.O.B terms⁴⁰ and without insurance or risk coverage for four or more weeks continuously to their European customers before they can expect payment for the first shipment. The exporter's cash-turn-around cycle on the French market is generally thirty days, but this can be subject to negotiation between the parties. In Switzerland, the payment cycle can range anywhere between 45 and 90 days depending on the customer. Major retail chains tend to have longer payment cycles. In other words, financially fragile African fresh-produce enterprises wishing to engage the global market must be prepared to provide hefty commercial credit to their more financially solid partners abroad. And African exporters must be careful not to interrupt the supply chain however stressful their financial condition for fear that, as frequently happens, their European clients should switch to other supply sources and delay payment for produce already shipped.⁴¹

The payment received is generally below the exporter's expectations. While it is a fact that, because of the fragile and perishable nature of its trading stock, the fresh produce industry is more risk-prone than probably any other market sector, it is also a fact that some importers forge reasons for foul play and under-payment. In the case of pineapple for example the reasons – sometimes not initially notified to the exporter by the importer on reception of merchandise – would include: a difficult market because of weather conditions or competition from Latin America; various produce quality problems; wet or torn cartons; poor grading; lack of beautiful pineapple crowns; etc. Disputes also arise frequently on the exact shipment weight, the importer's weight usually being inferior to the weight indicated on the airway bill.

Let us now revert to Chede's pineapple shipment of 15 June 2002 to Commercial Fruits. The sales report in box 19 refers to a preceding shipment but its purpose is to indicate a practice in the sector. Some importers do not provide such a report but it can be useful to avoid surprises and for raising timely queries about selling price, usually not necessary where a firm price has been agreed in advance, as is usually the norm in Switzerland for example. In France selling on commission basis is commonplace. In this respect, the French Ministry of Agriculture provides a very useful service known as Service des Nouvelles des Marchés (S.N.M: www.snm.agriculture.gouv.fr), which regularly compiles and publishes fresh produce prices, including for tropical produce, in the country's main agricultural produce markets (marchés d'intérêt national or MIN) located in Rungis near Paris and other major cities, in order to promote transparency and fair competition in the sector. Nevertheless, most French importers of tropical produce claim that the prices published by S.N.M are wholesale prices, not importer's prices, which they claim to be about 10 to 15 per cent below S.N.M. prices. That indeed was the case with the selling prices indicated in box 19.

⁴⁰ Some importers however sometimes require their new customers to make several initial shipments on C.I.F terms to enable them to evaluate the newcomer's "professionalism" before they can accept to share air-freight risk.

⁴¹ Virtually all European fresh-produce importers are aware of the fact that their small-scale or individual African suppliers are financially weak and have limited or no access to commercial credit, so the less scrupulous among them use this knowledge to delay payments and so trap African exporters in default and justify their switching to other suppliers and their claims of "unreliability" or "lack of professionalism" of African exporters.

Box 20 provides figures for gross sales and marketing costs for the shipment of 15 June 2002, received on 17 June by the importer. It is noted that the number of cartons received (293) corresponds to the number indicated on the airway bill. However, the consignment weight indicated by the importer is about 250 kg lower (3,372 kg) than the weight appearing on the airway bill (3,620 kg). On the basis on the lower gross weight, the importer calculates net weight at 3,047 kg, that is about 600 kg lower than the weight entered on the airway bill⁴². The net weight matters because the goods are sold on that basis, meaning that gross sales revenue derives from net weight. The breakdown of costs shows that the importer takes a sales commission of 10 per cent of gross receipts⁴³, amounting to 534 Euros. His freight charge in Euros corresponds to SDV 's equivalent total costs in CFA at point of departure from Douala airport. An additional charge of about 7 per cent (408 Euros) is taken for the handling (transit) agent at Charles de Gaulle airport at Roissy. Logistic costs alone (air-freight plus transit) represent 66 per cent of sales, while total costs amount to 4 071 Euros, or 76.2 of gross sales of 5,342 Euros for a pineapple consignment of 3.6 tonnes.

The market return on this shipment was 23.8 per cent (1,270 Euros) of gross sales, which translates into 230 CFA/kg, whereas the F.O.B cost of the shipment was CFA 300/kg, increased by the supply-side bottlenecks described earlier, and compounded by commercial tricks and cost structure at the importer's end. Commercial Fruits consistently paid punctually, within the market norm, whatever was due – according to their sales reports - so payment for the shipment was received thirty days later. But at that point Chede's commercial credit to the importer amounted to over 15,000 Euros for produce still to be sold or awaiting a sales report. It was subsequently learnt that this importer previously had serious disputes with Kenyan fresh produce exporters for alleged commercial malpractices, resulting in some of them going out of business.

Thus the commercial risks are heavily stacked against African exporters, who are completely at the mercy of the importers. The practice of selling on commission basis used by some European importers of African fresh produce is everything but transparent; it is neither viable nor sustainable for African exporters. Their relationship with the importers is cast entirely to the advantage of the latter and fraught with risk of abuse. Needless to be reminded that sharks live off the smaller fish.

The problem is aggravated by two serious shortcomings in the sector. The first is the lack of an effective exporters organization in Cameroon (just as in many other countries of the region) capable of providing strategic guidance and protection to its members, including: promoting high-value products and national brands; identifying profitable market segments; screening and vetting foreign customer networks; investigating complaints and conducting due-diligence procedures; negotiating lower freight costs and charter services. AGROCOM, which had been created specifically for such a role, does not currently provide these key services, leaving individual exporters highly vulnerable to the vicissitudes and risks of the global market.

The second shortcoming is the lack of representation in the export markets for small and medium-size exporters such as cooperatives exporting directly abroad. To that should be added the fact that few African countries have trade missions abroad, and the commercial attachés,

⁴² A typical explanation, particularly frequent for green beans for example, is that as the produce loses its freshness it tends to dry up, losing weight in the process. In the case of the Chede shipment under review, the importer did not give this reason but claimed that the merchandise had not been accurately weighed at point of departure in Douala.

⁴³ This percentage of sales commission never varies irrespective of sales performance; if sales are "poor", the exporter always bears the losses, never the importer who feels no obligation of accountability to the exporter for his performance or prices.

when they exist, care precious little for other than state business. For these reasons, African products and brands are very scarcely promoted and therefore tend to lack market visibility. Further, African exporters have limited possibility to prosecute commercial disputes with their foreign partners. Few small-scale exporters have the resources to despatch a representative abroad specifically to litigate an alleged malpractice, and the importers know that only too well, and rarely expect consequences from African diplomatic or consular representations.

On the basis of Chede's experience in the sector, there have been numerous such disputes in the past decade involving Cameroonian pineapple exporters in the Mounjo region (Littoral Province) and European (especially French) importers, leaving a long trail of grievances and bankruptcies at the Cameroon end. Even without a documented precise tally of such disputes by trading partner and importing country, experience indicates that problems are fewer in some markets (Northern European countries for example – though they import very little produce directly from small-scale African businesses) than in others. In general, however, European importers tend to treat Asian and Latin American exporters more professionally and diligently, and probably even more respectfully, than African exporters.

These details suggest that engaging the global market may not be as easy for small-scale African exporters as it is sometimes made to sound. Detailed knowledge of the functioning of export markets and of the commercial practices in each country is simply indispensable. For example, despite the disappointing returns on Chede's pineapple shipments to Commercial Fruits as shown above, resulting in the suspension of shipments to that importer, the cooperative's pineapple sales in Switzerland – where fixed pricing is the norm and handling agency (transit) charges for fresh produce are significantly lower than in France - average a net margin of 15 per cent, compared to losses or no margin on the French market, more familiar with sea-freighted pineapple (over 90 per cent of annual imports) than air-freighted produce.

But maritime transportation of pineapple by smallholders is not yet as developed in Cameroon as in Côte d'Ivoire or elsewhere. As such air-freight is still the most common mode of pineapple export by small-scale exporters in the country. Overall, for fresh produce to become a factor of poverty-alleviation, something needs to be done about the commercial practices and cost structures in some export markets. In addition, air-freight costs⁴⁴ should either go down by at least 20 per cent or a maritime transportation system should be developed to the same level as in Côte d'Ivoire, probably taking advantage of the banana industry's transportation system.

However, while maritime transportation makes sense to etch out a margin on the French pineapple market, it is far from being the norm in landlocked and wealthy Switzerland where attractive, well-perfumed fresh produce matters more than its cost. Within Switzerland itself the market further breaks down into segments, with the French-speaking half of the country having a preference for sizeable, entirely colourful (golden) pineapple with hefty crown, while the German-speaking half tends to prefer small sizes about one-third still green. The type of product

⁴⁴ Relatively high freight costs out of Africa are probably the single most serious obstacle to the development and expansion of African fresh produce exports by small scale organizations. The World Bank for example could play a leadership role in crafting a solution to this problem in consultation with the international air and sea transport industry in the context of NEPAD and the UN Millennium Development Goals. Just before SWISSAIR folded up, Chede had sought to develop a project with the company whereby the Swiss development agency would be requested to finance directly through SWISSAIR the full or partial cost of transporting produce by small scale African exporters for an agreed period of time. The Final result was to be a win-win situation: Swiss development aid funds would remain in Switzerland to create business and jobs in SWISSAIR while also expanding African exports, raising exporters' net returns and incomes significantly and reducing poverty by equal measure at producer level.

line also makes a difference. For example, if Chede's shipment to France had been, say, green beans or passion fruits, whose commercial value is twice that of pineapple, with all costs remaining the same, the profit margin would have been handsome, that is barring any tricks and mishaps at the importer's end. Furthermore, pre-export processing of produce considerably reduces the marketing risks mentioned above, thus providing yet another justification for intensifying the focus on food manufacturing, notwithstanding the tariff escalation system that hits valued-added or manufactured products on some export markets.

Knowing the cost of logistics, product markets and prices more particularly, preferences, quality standards, and general commercial practices on the demand side of the equation poses a challenge African small-scale exporters must overcome in addition, of course, to the supply-side constraints. In this respect, the Liaison Committee EU-ACP (COLEACP: www.coleacp.org), based in Rungis, France, did some splendid work in the 1990s for African exporters. A non-profit inter-professional association of ACP exporters and EU importers and other stakeholders of fruits, vegetables, flowers and ornamental plants, COLEACP initially made a substantial contribution to raising the market visibility of tropical fresh produce in Europe through publicity campaigns and other initiatives. It also organised training programmes for ACP exporters to raise their familiarity with European market requirements, especially quality standards, and facilitated the identification of export outlets and European clients.

Although COLEACP did not succeed to do much about high freight costs and dubious commercial practices penalizing ACP exporters on the European market, its services in support of small-scale exporters in particular were judged to fill an important gap in the ACP-EU horticultural trade. For example, it was thanks to COLEACP's technical assistance and sustained encouragement that Chede developed export marketing expertise. COLEACP's services were, unfortunately, significantly scaled back in the late 1990s by the EU, its principal financial source. It now focuses on a narrow range of activities such as its pesticide initiative programme, harmonised framework initiative on codes of practice in the ACP horticultural sector, and information services.

In the evolving context of the new Cotonou Agreement to be discussed later, COLEACP could probably be retooled by the EU to play an expanded pro-active role in supporting ACP exporters even more than it did initially, including wider promotion of ACP horticultural produce in EU member countries – especially the new members in central and eastern Europe; enhancing the flow of objective market information between exporters and importers, especially with respect to prices; assisting in the set-up and effective management of exporters' associations in ACP countries; recommending best practice standards in the industry – especially fixed pricing and payment modalities which do not pile commercial risks on ACP exporters as at present; training of ACP exporters in quality and packaging standards; working to find a solution to the serious problem of high freight costs; and following up and investigating commercial complaints.

These services are currently not provided by any other entity to make trade fairer to small-scale exporters. And that is one of the main justifications for Chede's evolving network of NGOs in Europe, which seek to enhance marketing support for Cameroonian/African smallholders at the global level, as shown in the next chapter under 8.4, while also providing other services such as identifying and supplying the most appropriate technologies and equipment as well as inputs, and generally undertaking awareness building campaigns on NEPAD and MDG.

The foregoing section concerns only the fresh produce industry. Very few small-size producer organizations directly export cash crops (cocoa and coffee especially) outside the fairtrade network. On a broader scale, a publication by Oxfam International (www.oxfam.org), entitled *“Rigged Rules and Double Standards (trade, globalisation, and the fight against poverty)”* would be a useful introduction to the global marketplace. A full understanding is also needed of the functioning of the multilateral trading system (MTS) under the aegis of the World Trade Organization (WTO), where African governments can contribute through constructive negotiations to shaping global trade talks in ways that take into account commitments undertaken by WTO membership in other international fora, such as global summit conferences on social development and the UN drive to eradicate poverty (UN/MDG). Notwithstanding the many challenges facing African exporters, there are also opportunities emerging on the horizon of regional, inter-regional and global trade.

7.7 Understanding the Multilateral Trading System (MTS)

Although MTS is generally understood to refer to global trade arrangements negotiated within the WTO framework (www.wto.org), it also covers for all practical intents and purposes sub-regional and regional trade arrangements, formal and informal, existing among countries, whether or not members of WTO, even though there is always the policy urge to bring such arrangements as far as possible into conformity with existing WTO MTS regime. The ACP-EU Cotonou Agreement, to be reviewed later, attempts to do precisely that. With respect to Africa’s internal trade arrangements and performance, we have already touched on the CEMAC sub-region and concluded that much ground remains to be covered to achieve the dream of agricultural trade in the central African sub-region.

At the continental level, intra-African economic integration is increasingly recognized for the same intrinsic merits that have justified intra-European economic integration over the past several decades, and which continues to deepen and expand. The NEPAD programme has placed commendable emphasis on intra-African trade, seen as the first stage and indispensable route to strengthening Africa’s presence on global markets and reversing the region’s marginalization. However, raising the current very low level (less than 10 per cent) of regional trade would require much attention being paid to infrastructure bottlenecks within individual countries, as found thus far in the Cameroon case, and within the inter-country context, as observed with respect to CEMAC in particular. Singing the multi-level merits of African economic integration without addressing the underlying infrastructure handicaps currently blocking such integration would make little sense.

As observed by ECA, shipping a car from Japan to Abidjan, including insurance, costs US\$1 500; shipping the same car from Addis Ababa (seat of the African Union) to Abidjan would cost US\$5 000. Road, air, and rail networks remain unconnected throughout the continent.⁴⁵ Therefore, African countries and their external development partners would need to restructure their strategic priorities and start tackling the infrastructure bane of the region’s development and agricultural expansion, including intra-regional trade in food products, as the mother of all solutions to recurrent African famines and famine alerts. No doubt, infrastructure development is resource-intensive, but so are recurrent humanitarian operations on the continent. Infrastructure provision to integrate national and sub-regional economies leading to regional

⁴⁵ Economic Commission for Africa: *Assessing Regional Integration in Africa*, op. cit.

integration could well prove very effective in fighting poverty in the region and stemming the present flood of migration of the youth to Europe and the U.S.

At the inter-regional level, The ACP-EU Cotonou Agreement, signed on 23 June 2000 as successor to the Lomé Convention harking back to 1975, is a 20-year development partnership embracing virtually all aspects of development cooperation between the two blocs of countries. As such the Cotonou Agreement is currently the most high-profile and comprehensive inter-regional arrangement between the 77 African, Caribbean and Pacific signatory countries and the European Union, which happens also to be the leading trading partner of these countries as well as their primary source of development aid. The wide-ranging Agreement with its 100 operative Articles, has as its overarching objective the reduction of poverty in ACP countries, to be achieved through political dialogue on issues of human rights, democratic principles, good governance and eradication of corruption, as well as through expanded economic and trade cooperation and development aid, underpinned by a €13.5 billion aid fund covering the first five years.

The Cotonou Agreement also contains some interesting innovative features, such as those designed to: (a) promote integration within the ACP community itself, including intra-African economic integration of course; (b) support infrastructure development; (c) create a favourable context for translating into practice the principle of national development ownership through implementation with EU support of a domestic development agenda consistent with the Agreement's provisions; (d) secure the full involvement, as partners to the Agreement, of non-state actors such the private sector and civil society entities; and (e) provide practical opportunities, especially through favourable trade terms, for the ACP countries to participate in and benefit from the global trading system. Whether or not this Agreement will achieve more impact than the 25-year series of agreements under the Lomé Convention is hard to predict. Much will depend on the willingness and ability of the ACP countries to take advantage of its generous provisions, especially in the area of agricultural development and trade, and to implement its fundamental development software packages relating, for example, to respect for human rights, democratic principles and rule of law, good governance and eradication of corruption. Political leadership in much of the continent continues to pay only lip service to these fundamentals as though their link to sound social and economic development had not yet been recognized.

Another major inter-regional (more precisely bilateral) initiative is the US government's African Growth and Opportunity Act (AGOA: www.agoa.gov), signed into law on 18 May 2000 and last updated on 12 July 2004 under the AGOA Acceleration Act of 2004 (AGOA III). The vast majority (37) of Sub-Saharan African countries, including Cameroon, have so far fulfilled the conditions for accession to the AGOA package of preferential development, trade, and investment benefits. The conditions for eligibility are very similar to the provisions of the Cotonou Agreement on human rights, democratic principles, good governance, rule of law and trade liberalization. Its scope is equally similar to that of the Cotonou Agreement, but it extends its benefits to include quota-free and duty-free imports to the US market of a wide range of products including agricultural and food items. Furthermore, it also aims to support infrastructure projects (roads, railways, ports, information and communication technology, etc) in order to accelerate intra-regional trade, which is one of its major objectives. AGOA is not yet fully operational in Cameroon, certainly not as much as in some other African countries such as Ghana, Kenya, or Mauritius. The current low or invisible profile of AGOA in Cameroon reflects a common African problem whereby, for various domestic constraints such as those analysed heretofore, governments and the business community are unable to take full advantage of

opportunities offered to them in the emerging context of the global trading system, as further discussed below.

7.8 ITC's Joint Integrated Technical Assistance Programme (JITAP)

Trading at the global level requires sound knowledge of the functioning of the trade agreements negotiated under WTO's aegis, such as the Uruguay Round of agreements of the 1980s, and now succeeded by the Doha trade agenda with special focus on agricultural trade. Raising understanding of these agreements is usually part of the trade-capacity building projects sponsored by the donor community, especially the EU under the Cotonou Agreement and the US under AGOA. However, the most comprehensive approach to such trade capacity-building initiatives is currently undertaken by the International Trade Centre (ITC), a UN body based in Geneva, and sponsored jointly by the UN Conference on Trade and Development (UNCTAD) and WTO.

ITC has been operating since 1998 a Joint Integrated Technical Assistance Programme (JITAP) for some African countries on a pilot basis. The first phase involving eight countries expired in 2002, and an ongoing second phase for 16 countries includes Cameroon. JITAP pursues three inter-related objectives: (a) to enhance the national capacity of the recipient countries to implement WTO agreements, take advantage of those agreements in the development of their exports, and enable them to contribute to global trade negotiations and related policy formulation; (b) to build national awareness and knowledge base on MTS issues among government officials, parliamentarians, academia, private sector, civil society and the media; and (c) to strengthen the capabilities of the business community to export to existing and new markets.

JITAP thus requires all national development stakeholders to be actively involved in project formulation and implementation, notably through the operation of a National Steering Committee representative of the stakeholders concerned. Additionally, implementation of JTAP in the recipient countries requires the coordination of the policies and actions of the key sector ministries. As such the JTAP project strategy in Cameroon should provide an opportunity for (a) evolving an inter-ministerial coordination mechanism that has been sorely lacking until now besides cabinet meetings chaired by the President or Prime Minister, and (b) a formal institutional forum for periodic dialogue between government and parliamentarians on the one hand, and the academia, private sector, civil society and the media on the other. These arrangements, currently lacking in Cameroon, are expected to be established by the JITAP project recently approved by the government. While the project will fill major knowledge and institutional gaps within government, private-sector and academic circles with respect to MTS issues, its justification is evidence of the country's present limited readiness (in knowledge, organization, and institutions) to engage the global trading system profitably beyond traditional export commodities. That limited readiness is also a major supply-side constraint.

8. STRATEGY

8.1 Synthesis

In assessing Cameroon's performance under each of the five strategic elements (political, administrative and fiscal decentralization; country-wide rural road network; enhanced S&T capacity harnessed to the agricultural and industrial sector; adequate and efficient producer-support institutions and services; and high-performing marketing organizations), which are indispensable to agricultural expansion, create and distribute wealth equitably, and eradicate poverty, it can be concluded that the government scored well below average under each element. This conclusion provides the key to the puzzle as to why Cameroon, despite its superior natural potential, has nonetheless performed below the scores achieved in agricultural production by the other comparator countries studied in chapter 2. That also explains why the poverty rate in Cameroon is currently the highest among the countries reviewed despite its petroleum exports.

In the context of our strategy, it may be noted that Cameroon's performance was particularly poor in the two strategic areas (decentralization and rural road network), which in a way exemplify the extent to which a government promotes democratic and human rights values. Indeed, decentralization enables the entire population (meaning all regions and ethnic groups constituting the national fabric) to participate fully in national governance arrangements and to feel a sense of belonging to a nation. Decentralization is the primary tool empowering the grassroots population to exercise their constitutional right to development, and to contribute ideas, energy and relevance to nation-building from the village level upwards. It also provides the medium for listening to local voices and promoting local traditions psychologically important for the self-esteem of village communities. Crushed since the colonial period, the villagers' self-esteem has never been recovered since then. Yet self-esteem is the root of motivation and self-confidence – the springs of performance achievements. Any wonder, therefore, that apathy has gripped most Cameroonian villages? Effective fiscal decentralization spreads out national revenues equitably across ethnic groups and the urban-rural divide. By its all-inclusive and opportunity-equalizing merits, decentralization is consistent with the thrust of the Universal Declaration on Human Rights.

A countrywide rural road system that enables the efficient flow of people and goods is a major condition for the effective operation of any system of decentralization. Where this condition is not met, the local population's ability to derive concrete development benefits from a decentralized framework becomes seriously circumscribed, since agricultural production cannot expand beyond subsistence requirements, services cannot be delivered efficiently, urban-rural commerce is curtailed, and the cost of providing other infrastructure elements such as housing and utilities, schools, healthcare centres, water systems, can be excessively high. Thus decentralization and rural road network reinforce each other virtuously or adversely. Where both are patently limited, rural poverty rates can approach epidemic levels, and that to some extent is the present situation of much of Cameroon's rural population. It is indeed the case in KMD.

In addition to the above, the third strategic factor for implementing our strategy is S&T. It is crucial to all other areas, starting with decentralization where ICT enables the re-engineering and rationalization of administrative systems and processes, as well as the efficient (on-line) communication between the different levels of government and horizontally among different public services. The new system of decentralization envisaged in Cameroon should be an

opportunity for introducing an electronic government (e-government) solution to public administration, starting at the village and local government levels where an ICT culture would seem to correspond to the practical, horizontal, and communitarian value system of village communities. S&T intervenes also in road building as noted in chapter 4, especially by enabling the conversion of local materials for construction purposes and thereby reducing costs, and sourcing from abroad of the latest, efficiency-proven road and bridge building technologies. S&T also is required to further develop and expand the national S&T stock itself, to produce high quality seeds and other farm inputs, build and efficiently operate food factories, and facilitate marketing operations through efficient ICT applications, including electronic commerce (e-commerce).

Decentralization and rural road network again become indispensable for S&T products and innovations as well as seeds, fertilizer and other inputs to reach the rural farmers or be accessible to them, and for logistic and marketing arrangements in support of the farmers to produce their optimal effects. In sum therefore the five elements of our strategy are physiologically intertwined so much so that implementing one or more without the others would certainly not click on agricultural expansion for the rural smallholders, and surely not on poverty eradication.

An integrated and synchronized (or logically sequenced) approach involving village/farmer representatives and organizations, all government development Ministries including Finance and Territorial Administration and Decentralization, donor community, private sector and the media to bear witness and hold to public account, is indispensable to the success of the package. Formulation and implementation of the strategy would require a broad-based consultative forum (such as envisaged for the ITC-supported JITAP project in Cameroon), as well as a steering implementation committee (including farmers' representation) lodged in the Prime Minister's office.

Tested in preceding chapters against the backdrop of Cameroon's agricultural performance since 1960 and its current poverty rate relative to the performance of four other sampled countries, the conceptual validity of our strategy is beyond dispute in terms of its effectiveness in tackling the root causes of village/rural poverty in Africa. It can be implemented independently (provided its five pillars are intact) within different geographical units, from village up to continental level. While the five individual success factors do matter, even more important should be their integrative, synchronized thrust involving a multi-stakeholder approach as a pre-condition for motivating rural farmers to overcome poverty.

As such, the strategy should usefully contribute ideas to the design of domestic and externally funded agricultural development projects addressed to rural farmers in any African country. While the five components need not necessarily feature in equal measure in each and every rural agricultural development project, a pre-feasibility study is at least required to ensure that missing components are either already in place and operating efficiently, or that they would be funded from another source provided the condition is met for a tightly integrated programme approach in which the different elements virtuously reinforce one another.

8.2 Costs

The methodology used in this study is not amenable to the computation of cost estimates over the next ten years or so for the implementation of the proposed strategy. The areas of emphasis discussed in this study and the findings under each chapter should nevertheless illuminate the next review of Cameroon's PRSP and some of its strategic assumptions. In any

event, the strategy simply amounts to waging war on poverty, and the cost of any war is rarely ever taken into account, in Africa or elsewhere, before troops start moving against enemy aggression, in this case rural poverty.

8.3 Rewards

If the costs are difficult to measure, the rewards are much less so and even self-evident. Below are just a few examples:

- Increased agricultural productivity and diversification by motivated rural farmers, resulting in the expansion of employment opportunities in the rural sector;
- Higher incomes and living standards of the rural population (poverty reduction);
- Secure and predictable source of raw materials for a steadily expanding agro-processing sector;
- Expansion of local, regional and international trade in primary and processed products, leading to steadily improving macro-economic performance and stability;
- Established foundation for long-term national economic growth and industrialization;
- Reversal of the current pattern of village-urban migration of the youth in search for employment and city attractions, implying decreasing demands on public expenditures for recurrent urban infrastructure extensions;
- Improved quality of city life relieved of stressful demographic pressures and crime waves, thereby demonstrating the validity of the thesis that a “village-first” development strategy ipso facto benefits urban centres as well, in contrast to the “city-first” strategy practised in Cameroon since independence, with the alarming results documented in this study;
- Levelling the national development playing field by drastically reducing disparities in the distribution of national revenues and development opportunities between the urban and rural sectors and among ethnic groups of the nation;
- Building political stability and social peace evenly throughout the nation and thereby removing the root causes of sectarian violence such as currently afflict parts of Africa (e.g. Darfur in Sudan, Nigeria’s Delta region, or Northern Uganda);
- Making the indigenous Cameroonian/African socio-cultural heritage the foundation and fountain of nation-building.

8.4 Chede producer-support and marketing strategy

