FAAP

Framework for African Agricultural Productivity

The African Union

NEPAD
The New Partnership
for Africa's Development

FARA

Contents

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Forum for Agricultural Research in Africa
Secretariat
PMB CT 173 Cantonments
2 Gowa Close, Roman Ridge
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Forum for Agricultural Research in Africa (FARA)
PMB CT 173 Cantonments
2 Gowa Close, Roman Ridge
Accra, Ghana
Tel.: +233 21 772823 / 779421
Fax: +233 21 773676
E-mail: mjones@fara-africa.org
Web site: http://www.fara-africa.org

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FAAP

framework for african agricultural productivity

Foreword

The Framework for Africa's Agricultural Productivity is a product of extensive consultations among diverse stakeholders at different levels in Africa, including the development partners who have continuously supported Africa. The FAAP process did not end when the African Heads of States endorsed it (African Union Summit, Banjul, Gambia, June 2006) but rather it marks the beginning of hard work required to make it the tool for implementing CAADP pillar 4. FARA will primarily work with the African Union and NEPAD so that the African vision is well articulated in its implementation. But at the same time FARA will have to work with the African government's concerned ministries and regional economic bodies and will still depend on the subregional research organizations (SROs --- ASARECA, CORAF/WECARD and SADC-FANR) and national research systems to ensure that the principles of FAAP are aligned to the existing and future programmes on agricultural productivity.

The FAAP process will work based on lessons learnt from similar ongoing initiatives such as the national poverty reduction strategies and regional economic communities' strategy for agricultural productivity. As the national programmes are aligning their programs to FAAP, the SROs are working closely with the RECs, to develop their own Multi-country Agricultural Productivity Programme (MAPP) at the subregional level. The national programmes will be the basic block, and anything that has cross-border advantages will be passed on to the subregional level.

These partnerships will not be limited to government agencies but will involve collaboration with civil societies including the private sector and farmer's organizations. In fact, the first component of FAAP focuses on farmer empowerment by catalyzing institutional reform at research, extension, training and education systems. This will be supported by the government's increased investment in ARD as described in component 2 and complemented by more harmonized and coordinated external support to ARD as described in component 3. The basic concept is to bring together the political, technical and financial resources to make the required changes and address Africa's challenges.

FARA together with African Union and NEPAD is confident that this ambitious goal will be achieved only through the full support of all stakeholders of agricultural productivity.

Dr. Rosebud Kurwijila
Commissioner
Department of Rural Economy and Agriculture
African Union

Prof. Richard Mkandawire
Agriculture Advisor
NEPAD

Dr. Monty P. Jones
Executive Secretary
FARA

Executive summary

Africa's leaders see agriculture as an engine for overall economic development. Sustained agricultural growth at a much higher rate than in the past is crucial for reducing hunger and poverty across the Continent, in line with Millennium Development Goals. The African Union's New Partnerships for African Development (AU-NEPAD) has issued a Comprehensive African Agriculture Development Programme (CAADP) which describes African leaders' collective vision for how this can be achieved. It sets an ambitious goal of 6% per annum growth for the sector.

A key component of the vision calls for improving agricultural productivity through enabling and accelerating innovation. CAADP Pillar IV constitutes NEPAD's strategy for revitalizing, expanding and reforming Africa's agricultural research, technology dissemination and adoption efforts. Currently, chronic shortcomings afflict many of the Continent's agricultural productivity programmes. This explains the historical underperformance of the sector and the current plight of African farmers. Consultations with agricultural leaders, agricultural professionals, agri-business, and farmers shows substantial agreement that institutional issues such as capacity weaknesses, insufficient end user and private sector involvement, and ineffective farmer support systems persist in most of Africa's agricultural productivity programmes and organizations, hampering progress in the sector. These problems are compounded by the fragmented nature of support and by inadequate total investment in agricultural research and technology dissemination and adoption.

Despite the enormous challenges facing African agriculture, there are reasons for optimism. The African Union (AU), in establishing NEPAD and formulating CAADP has given its unequivocal political backing for this effort. In setting up the Forum for Agricultural Research in Africa (FARA), Africa has created a way of bringing technical leadership into the frame. Africa's development partners have signalled their willingness to respond to Africa's call. For example, at Gleneagles, at the UN, through the Commission for Africa, and in many other ways their intention to provide technical and financial support has been made very clear.

The Framework for African Agricultural Productivity (FAAP) brings together the essential ingredients needed for the evolution of African national agricultural productivity programmes. A number of guiding principles have been derived from consultation with Africa's agricultural people and with their development partners. The FAAP indicates how such best practice can be employed to improve the performance of agricultural productivity in Africa. Beyond improving the performance of individual initiatives, the FAAP also highlights the need to replicate and expand such programmes through increased levels of investment. It also stresses how increased funding must be made available through much less fragmented mechanisms than has been the case in the past. Harmonization of Africa's own resources with those of development partners therefore needs to be placed high on the agenda.

The FAAP has been developed as a tool to help stakeholders come together to bring these political, financial, and technical resources to bear in addressing problems and strengthening Africa's capacity for agricultural innovation.

1 Introduction

The Comprehensive Africa Agricultural Development Programme (CAADP) has been endorsed by the African Heads of State and Government as a vision for the restoration of agricultural growth, food security, and rural development in Africa. A specific goal of CAADP is to attain an average annual growth rate of 6 percent in agriculture. To achieve this goal, CAADP directs investment to four mutually reinforcing 'pillars': (i) extending the area under sustainable land management and reliable water control systems; (ii) improving rural infrastructure and trade-related capacities for improved market access; (iii) increasing food supply and reducing hunger; and (iv) agricultural research, technology dissemination and adoption. Each of these pillars incorporates policy, institutional reform and capacity building.

NEPAD has requested the Forum for Agricultural Research in Africa (FARA) to take the lead in developing a framework through which the challenges prioritised by the CAADP Pillar IV might effectively and efficiently be achieved. In response to NEPAD's wishes, FARA has, in consultation with stakeholders, developed the Framework for African Agricultural Productivity (FAAP). This framework addresses the challenges of CAADP Pillar IV and its aim to achieve strengthened agricultural knowledge systems delivering profitable and sustainable technologies that are widely adopted by farmers resulting in sustained agricultural growth. This will require major improvements in African capacity for agricultural research, technology development, dissemination and adoption, together with enabling policies, improved markets and infrastructure.

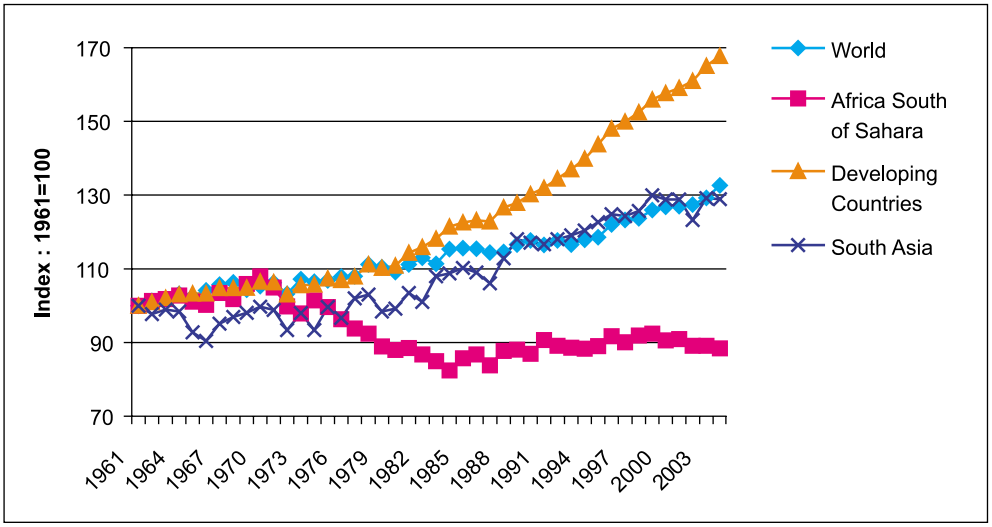
The purpose of FAAP is to guide and assist stakeholders in African agricultural research and development to meet the objectives of CAADP Pillar IV and the African growth agenda by empowering farmers, livestock producers and their organizations; strengthening institutions, both public and private; promoting harmonisation of internal and external actions and actors; and generating increased investment. The consultation process through which FAAP was developed concluded that the priorities of CAADP Pillar IV for agricultural research, technology dissemination and adoption require significant changes in and approaches to: (i) strengthening Africa's capacity to build human and institutional capacity; (ii) empowering farmers, and (iii) strengthening agricultural support services. By addressing these factors and actively integrating the private sector into the process as well as undertaking the necessary reform of public sector institutions, Africa will establish the capacity, as indicated in CAADP Pillar IV: *of making a paradigm shift away from a principally technological package approach to a truly integrated agricultural research approach and to ensure that researchers (national and international) work together with smallholders, pastoralists, extension agencies, the private sector and NGOs, to have impact on the ground*.

2

African agricultural productivity: an imperative for change

High and sustained rates of agricultural growth, largely driven by productivity growth, will be necessary if African countries are to accelerate poverty reduction. This is because agricultural growth has powerful leverage effects on the rest of the economy, especially in the early stages of development and economic transformation, when agriculture accounts for large shares of national income, employment, and foreign trade. This is the case in many African countries today. Growth in agriculture enables general patterns of development that are employment intensive and hence favourable to the poor. Agricultural growth benefits both rural and urban poor by providing more food and raw materials at lower prices; freeing up foreign exchange for the importation of strategic industrial and capital goods; providing growing amounts of capital and labour for industrial development; providing a growing domestic market for nascent national industries; and reducing poverty by increasing labour productivity and employment in rural areas.

The poor performance of the agricultural sector explains much of the slow progress towards reducing poverty and hunger in Africa. Agricultural growth has barely kept up with population growth rates such that the growth in per capita agricultural output has lagged far behind other developing regions (**Figure 1**). To reverse this trend and meet the Millennium Development Goal (MDG) of halving poverty by 2015, the sector needs to grow much faster and maintain annual growth rates of about 6.2 percent according to recent estimates. Some countries will require even higher growth rates, given the many years of neglect.



Source: FAOSTAT, 2006

Figure 1. Growth trends in per capita value-added output of agriculture.

Can Africa achieve this required rate in agricultural growth? This will depend on how quickly gains in productivity can be achieved to allow the sector to grow and compete in both domestic and international markets. Increasing agricultural productivity implies a transformation from traditional to modern agriculture, which "involves both technical change and the presence of input, seasonal finance and marketing systems to increase farm production and deliver it to consumers at a competitive price." (Poulton, Kydd and Dorward, Development Policy Review 2006(4) p.244).

At the production level, agricultural productivity measures the value of output for a given level of inputs. To increase agricultural productivity, the value of output must increase faster than the value of inputs. Gains in overall agricultural productivity can therefore come from changes in the physical productivity level through change in technology employed in the production process, which results in more output per unit of input such as land (yields) or labour, or from changes in production and market costs and hence the increased profitability of farmers. Thus, increasing agricultural productivity not only relies on improved production efficiencies, such as through adoption of modern or improved technologies and practices, but also critically relies on many other factors such as adequate access to productive resources, well functioning markets and infrastructure, and a conducive policy environment (e.g., stable macro-economic policies).

As **Figure 2** shows, productivity levels in Africa, in terms of both land or labour productivity, still lag far behind other developing regions. Within Africa, the situation is especially marked in Southern and Eastern Africa (excluding South Africa). Low growth rates in cereals yields and production in Africa have translated over the years into falling per-capita food production and increased imports, contributing to high levels of food insecurity at both national and household levels (20 percent of African cereal consumption depends on imports, including food aid).

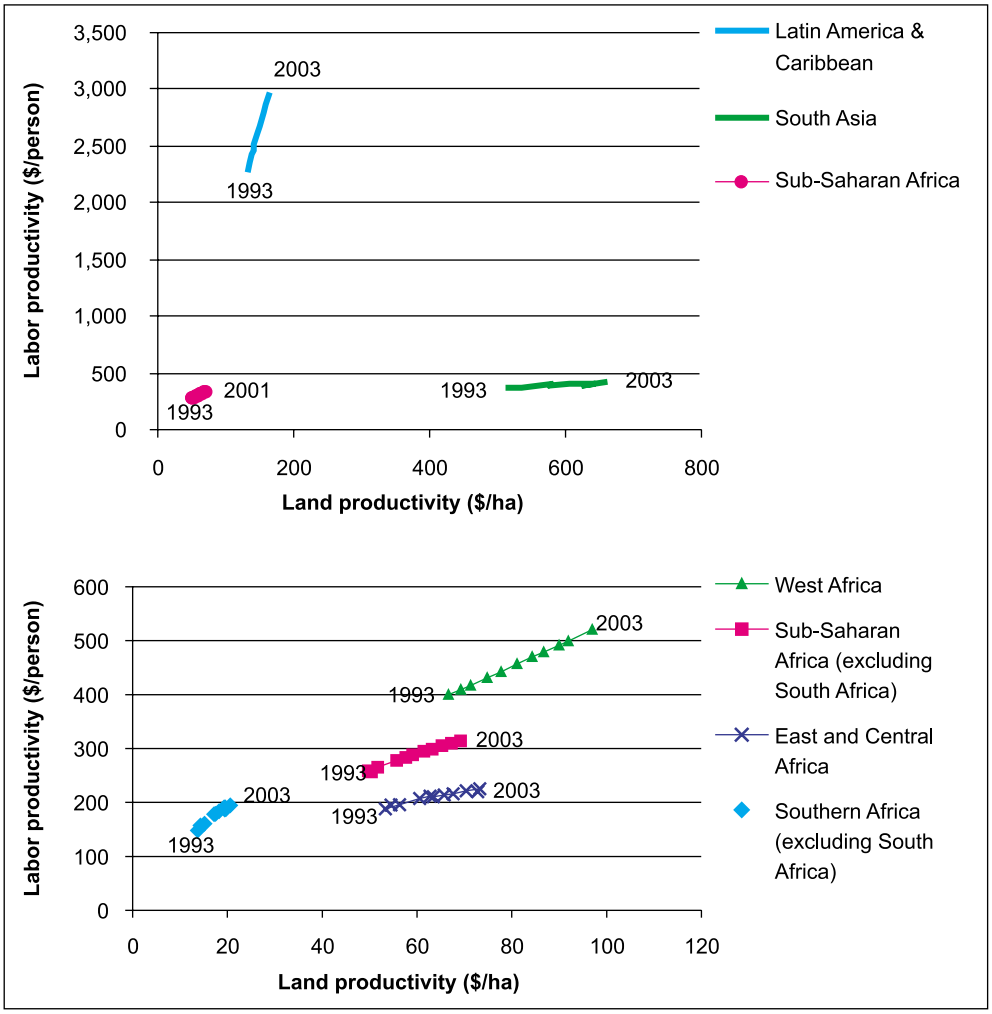
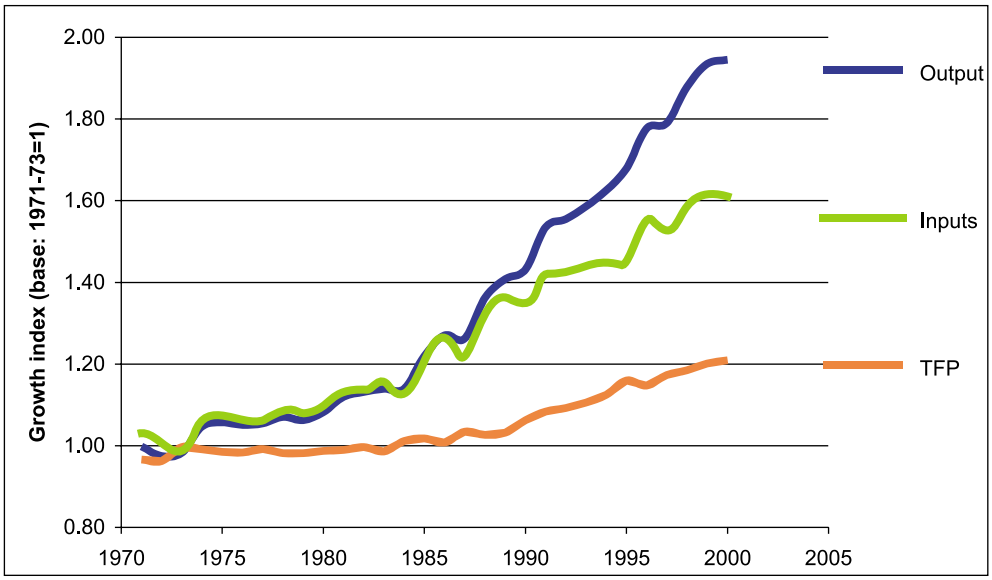


Figure 2. Land and labour productivity, 1993–2003.

How fast must agricultural productivity grow to produce the 6% growth rate in agriculture called for by CAADP so that agriculture will significantly contribute towards meeting the MDG's of halving hunger and poverty by 2015? One recent study[1] examined growth in total factor productivity (TFP) to answer this question. Total factor productivity represents output growth not accounted for by the growth in inputs. Much of the growth of output in Africa has been due to expanded use of land, labour and livestock, until the 1990s, when recent estimates imply that productivity growth has played an increasingly larger role, as illustrated in Figure 3. TFP grew at an annual rate of 1.3% on average during the 1990s, accounting for approximately 40% of the 3.1% annual growth in agricultural output (**Table 1**). Growth in the traditional inputs of land, labour, and livestock accounted for the other 60% of agricultural

1. Ludena, Carlos. 2005. "Producivity growth in crops and livestock and implications for world food trade", Ph.D. Dissertation, Department of Agricultural Economics, Purdue University, West Lafayette, IN, USA.



Source: Ludena, 2005

Figure 3. Sources of agricultural output growth in SSA, 1971–2000.

output growth. To achieve the desired agricultural growth rate of 6% or more will require total factor productivity growth rates of 4.4% per year. This is because the growth in land and labour inputs are unlikely to continue to grow at the same rate as in the past, and productivity must increase at a faster rate for output to grow. The expansion of the labour force is tied to the demographics of the region and changes in the recent past show a reduction in the growth of labour. While the economically active population in SSA increased at an average growth rate of 2.1% during 1981–1990, this growth was reduced to 1.9% per year in the 1990s. The estimated expansion of productivity at an average annual growth rate of 4.4% assumes that labour and capital will continue to grow as in the 1990s, contributing 1.8 percentage points to growth in agriculture.

Lessons learned from the success of agricultural-led growth strategies elsewhere in developing countries show that productivity and overall growth in agriculture has been technologically driven. However, **Table 2** shows that one measure of productivity, the share of areas planted

Table 1: Required agricultural productivity growth rate to achieve 6.2 percent output growth.

	Productivity (TFP)	Agricultural Output	Stock of Inputs	%TFP in Output Growth
1971–1980	– 0.1	0.8	0.9	– 15.7
1981–1990	0.7	2.8	2.1	25.9
1991–2000	1.3	3.1	1.8	41.7
MDG Target *	4.4	6.2	1.8	71.0

Source: Ludena, 2005. * MDG Targets estimates the productivity growth required to achieve a 6.2 percent growth in output, assuming no change in the growth of traditional input use.

Table 2: Agriculture technology and productivity, by developing region.

	Share of area planted to modern varieties (percent) [a]				Contribution of crop genetic improvement to yield growth [b]	Cereal yield (kg per hectare) [c]	Average anl growth in cereal yield (percent) [d]	Average annual growth in food production per capita (percent) [e]
	1970	1980	1990	1998	1960-98	2000	1980-2000	1980-2000
Asia	13	43	63	82	0.88	3.662	2.3	2.30
Latin America	8	23	39	52	0.66	2.09	1.9	0.90
Middle East and North Africa	4	13	29	58	0.69	2.660	1.2	1.00
Sub-Saharan Africa	1	4	13	27	0.28	1.112	0.7	– 0.01

a. From Evenson and Gollin 2003.
b. Measured as a share of increase in productivity.
c. From World Bank 2003a.
d. From FAO 2003b.
e. Sub-Saharan Africa refers to all countries in columns 1-5 and columns 6-8 refers to 33 countries in "Tropical and Sub-Saharan Africa" as defined in Sachs and others 2004

Source: Adapted from Sachs and others 2004.

to modern varieties in Africa, is only a small fraction of those in other regions and genetic improvement accounts for only 28% of yield growth compared with 88% in Asia. In addition to technology, adequate access to rural infrastructure has been essential for promoting growth in agriculture as well as in the non-farm economy and rural towns, and for strengthening rural-urban demand linkages. Equally important is that growth most be broad-based, so the majority of smallholders also benefit from technology innovation. Distortions in prices also need to be removed to provide incentives for farmers to invest and produce.

Pay-offs to increased agricultural research and extension investment can be particularly high. Unfortunately, investment in agricultural R&D in Africa has stagnated over time (**Figure 4**).

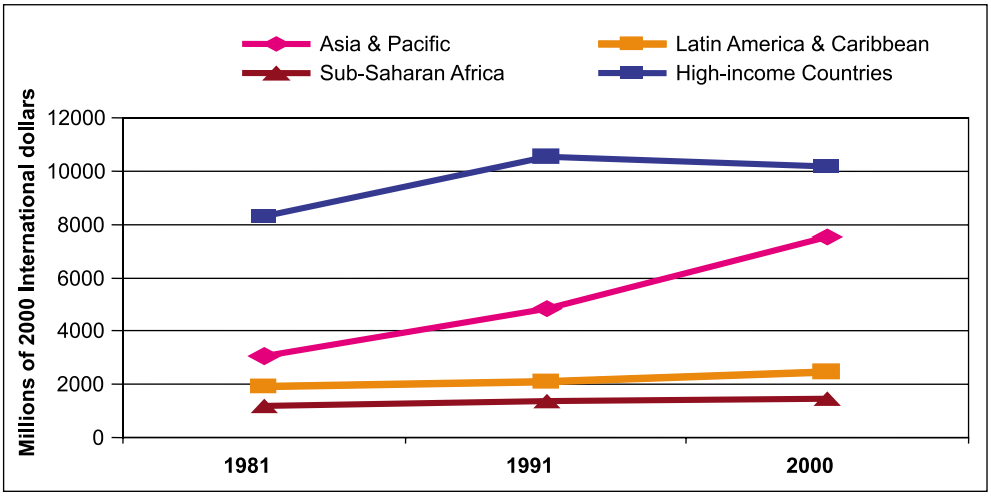


Figure 4. Public Agricultural Research (millions of year 2000 international dollars).

Focusing R&D investment on improving yields of basic food staples has the potential to leverage stronger growth linkages. Empirical evidence from around the developing world suggests that a $1 increase in staple agricultural income will generate an additional $0.30 to $0.80 in additional income in rural nonfarm economy and a disproportionately large increase in the country's total GDP, through increased demand for inputs, and more importantly, through increased consumption demand as a result of higher agricultural incomes. Similarly, investment in infrastructure, particularly rural feeder roads, can also lead to large productivity growth and poverty reduction effects. In addition to its effects on agricultural productivity, infrastructure investment can also have large growth effects on nonfarm sector.

Agricultural growth combined with non-agricultural growth produces even larger benefits. This is because growth in non-agriculture incomes also increases demand for agricultural products. Meanwhile, non-agricultural incomes can rise further through multiplier effects emanating from agricultural growth itself. These linkages are very important in creating the long term growth dynamics required for structural transformation towards a more industrialized economy.

3 The Framework for African Agricultural Productivity (FAAP)

Section two has shown that meeting the CAADP objective of a 6% growth rate in agriculture will require a 4.4% growth rate in productivity. This rate of productivity growth is much higher than the 1.3% growth rate that SSA achieved on average in the 1990s, although some countries have achieved higher rates over certain periods of time. Business as usual will not achieve the high productivity growth rates that are required. Investments in agricultural productivity must be prioritised on those activities that have the largest potential to impact productivity, and they must be managed for results.

Consultations with Africa's agricultural leaders, agricultural professionals, agri-business, and farmers found substantial agreement that failures in various institutional areas are the main factors hampering progress in the sector. Capacity weaknesses, insufficient end user involvement, ineffective farmer support systems, and systematic fragmentation between elements of the overall innovation system (i.e., between research, extension, training, farmers organizations, the private sector, consumers, etc.) are common to most of Africa's agricultural productivity institutions and activities. CAADP further points out that these problems are compounded by the fragmented nature of external support and by inadequate overall investment in agricultural research and technology dissemination and adoption.

Building on this consensus, FAAP sets out what African stakeholders think is needed to get African agriculture back on track. The emerging African agenda for improving agricultural productivity, profitability, and sustainability through innovation highlights three principal elements:

(i) institutional reform, including the efficient use of resources for activities that are most likely to achieve productivity increases; (ii) increasing total investment; and (iii) harmonising funding. Detailed development of how to implement the recommendations for each of the elements of the agenda is, of course, time and location specific and must be determined country by country and case by case.

The rest of this section discusses each element of the framework in detail while the following section discusses its implementation.

3.1 Evolution and reform of agricultural institutions and services

Lessons from across the African continent and elsewhere have shown that the effectiveness of agricultural technology generation and dissemination institutions depends crucially on relevance and responsiveness to farmer needs. At present, farmers' needs and those of agri-business too often do not sufficiently drive the orientation of agricultural research and extension services, causing lack of relevance and impact. Even when relevant, know-how and technologies are too often not widely taken up by farmers, suggesting also the lack of effectiveness in the transfer of technologies. The difficulty of maintaining human capital in these systems, the bureaucratic environment of the public sector, and a chronic shortage of operating resources also constrain the performance of research, extension, training and education systems (suggesting an inadequacy of investments in human capital). In order for Africa's agricultural productivity efforts to be successful, they should reflect the principles of :

1. Empowerment of end-users to ensure their meaningful participation in setting priorities and work programmes for research, extension, and training to ensure their relevance.
2. Planned subsidiarity to give responsibility and control over resources for agricultural research, extension, and training activities at the lowest appropriate level of aggregation (local, national and regional).
3. Pluralism in the delivery of agricultural research, extension, and training services so that diverse skills and strengths of a broad range of service providers (e.g., universities, NGOs, public and the private sectors) can contribute to publicly supported agricultural productivity operations.
4. Evidence-based approaches with emphasis on data analysis, including economic factors and market orientation in policy development, priority setting and strategic planning for agricultural research, extension, and training.
5. Integration of agricultural research with extension services, the private sector, training, capacity building, and education programmes to respond in a holistic manner to the needs and opportunities for innovation in the sector.
6. Explicit incorporation of sustainability criteria in evaluation of public investments in agricultural productivity and innovation programme (fiscal, economic, social and environmental).
7. Systematic utilisation of improved management information systems, in particular for planning, financial management, reporting, and monitoring and evaluation.
8. Introduction of cost sharing with end users, according to their capacity to pay, to increase their stake in the efficiency of service provision and to improve financial sustainability.
9. Integration of gender considerations at all levels, including farmers and farmer organizations, the private sector, public institutions, researchers and extension staff.

This list of guiding principles is not comprehensive and it does not address every aspect of institutional design relevant to agricultural productivity interventions. However, it does identify areas which require the most urgent attention. Some programmes already attempt to include these principles. For others, their application to the reform of institutional structures will help solve the problems discussed earlier, especially for improving relevance and effectiveness of research and extension systems, as well as related training, capacity building and education programmes, which are essential for achieving bigger impact on agricultural productivity, profitability and sustainability.

3.1.1 Empowerment

Farmer empowerment[2] will play a key role in improving agricultural productivity and efforts to develop systems that foster greater farmer knowledge, control of funds, organizational power and institutional participation; allowing producers to become more active partners in agricultural productivity initiatives. This will require:

1. Enabling them to express their demands and set the research agenda.
2. Providing access to information.
3. Enabling them to participate intellectually.
4. Enabling them to participate in quality control.
5. Enabling them to learn and turning villages and communities into knowledge centres.
6. Making the research and advisory systems responsive and responsible.
7. Research on the ICT and distance learning techniques that will put the farmers in the driving seat by empowering them to access the information they need when they need it.

Farmers who have the capacity to analyse their constraints and identify opportunities, articulate their needs, exchange knowledge, and improve their bargaining power will have better access to, and use of, relevant agricultural knowledge and technologies. In other words, farmers and other beneficiaries must be empowered through knowledge, control of funds, and strong organizations, so as to drive development. While farmer empowerment may target farmer and farmer group capacity building, it should be mainstreamed throughout agricultural technology development and dissemination systems to allow the emergence of a more bottom up approach, giving end users true voice. FAAP will have different roles to empower farmers as explained below.

Putting Farmers at the Center of Agricultural Innovation Systems: FAAP advocates that farmers be at the centre of innovation systems' approaches. Therefore, FAAP core business is to empower farmers to be active players in improving agricultural productivity not just in terms of increasing their yields but also in decision making on how programmes and policies are shaped. Actors such as policy makers, researchers, extension workers or development agencies should be more accountable to the farmers. FAAP will therefore advocate among all actors that farmer empowerment be put upfront. It will harness capacity wherever it exists in or out of Africa towards this end product.

FAAP as facilitator of institutional changes and capacity building that will empower farmers. It will encourage different actors such as research to support the development of viable producer organizations that can represent the interests of farmers and pastoralists in public

2. Empowerment is attained when farmers, through their groups, networks of groups and associations, acquire the ability to determine their own needs and production targets, and assume the authority, resources and capabilities to hold accountable and influence the content of public and private agricultural services, such as extension, research, training, information, investment and marketing.

policy making, open new market opportunities for their members with the required inputs and services. This could include the following:

- Sensitising and mobilising smallholders and pastoralists to create groups or associations around economic activities (e.g., input and/or credit access, marketing, agro-processing).
- Strengthening capacity of existing farmers' associations and national producers organizations to provide more efficient services to members.
- Assisting farmers' organizations to participate in policy making, priority setting and governance of NARSs and advisory service systems.
- Promoting the use of modern technologies and distance learning approaches to enable farmers and pastoralists to become knowledgeable and innovate with confidence.
- Linking rural communities to markets through interactive information services that exploit modern information and communications technology (ICT) such as mobile phone short messaging services (SMS).

FAAP will play a catalytic role to implement the necessary changes at all levels. It will extend into practice the genuine intellectual involvement of the farmers in setting the agricultural productivity programmes, i.e., research agenda and in the research itself. This could be made by:

- Catalysing support for farmers' organizations in the development and implementation of promising innovations.
- Stimulating reviews of legal and regulatory frameworks to create supportive institutional environments.
- Advocating research on innovative financing of farmers, input suppliers and produce merchants.

3.1.2 Agricultural extension

Moving towards more participatory agricultural extension will allow greater responsiveness to farmers' needs and facilitate learning how they could increase their own productivity, raise their incomes, collaborate effectively with one another (and with partners in agri-business and agricultural research) in addressing their individual and their common problems, and become actively involved with major stakeholders in determining the process and directions of innovation, including technology generation and adoption. Thus, while one underlying motivation is growth, extension also contributes to *empowerment—helping farmers to help themselves*—through the generation of human and institutional capital.

To do this, the role of extension systems will shift from prescribing to facilitating. Instead of trying to "sell" predefined packages, extension will increasingly focus on building capacity among rural people to identify and take advantage of opportunities (both technical and economic) and to cope more effectively with risk and adversity. To perform such a wide-ranging role, extension service providers must be trained in areas beyond technical agriculture. However, this does not mean that they should return to performing other local government duties such as tax administration, nor should they return to the task of delivery of credit or inputs such as seeds and fertilisers. Their focus will be centred on helping farmers to better understand their own farming challenges, and to access and utilise information and associations which can help them to improve their own livelihoods sustainably.

The success of extension programmes is tied to their responsiveness to the specific needs of the clients and market opportunities. As a consequence of empowerment, farmers will be better equipped to select, test, compare and adapt appropriate technological, service and market options. Through their own farmers' associations and local governments, farmers can participate in decisions about the design, funding, governance, execution, and evaluation of extension programmes.

Application of the FAAP guiding principles will help agricultural extension systems evolve in the directions suggested above so that:

- Extension services will increasingly be provided through performance-based contractual arrangements, rather than by civil servants. Potential extension service providers may include combinations of private sector, NGOs, farmers' associations, universities, or any other entities with the capacity to provide extension services. In allowing for a plurality of providers, such arrangements take advantage of a broad array of already available field expertise. They contribute to developing the private sector in rural areas. Extension services provided by the private sector are typically more efficient and accountable for their performance and results. They also allow for more flexibility for promoting staff who perform well and dismissing those who don't.
- Farmers, through their groups and associations, will have significant influence over the allocation and use of agricultural services expenditures, e.g., by contracting extension service providers.
- Contracting out extension services will not eliminate the role of the public sector: when extension delivery is contracted out, the government role becomes one of financing, regulation (e.g., policy, quality assurance, oversight), and provision of training and information to the organizations or individuals contracted to deliver extension.
- The costs of extension are gradually shared with local governments, farmers' associations, and eventually the producers themselves. For some commodities, such as cotton, sugar or poultry, agribusiness partners may support part of the cost of providing extension services.
- Where knowledge and solutions are not available, formal and informal means should be in place to ensure that farmers as a group have voice in decisions affecting research priority setting, funding, execution, and evaluation. Resources and mechanisms should be established to make it possible for farmers and extension systems to pay researchers, whether from the public or the private sector, to carry out on-farm participatory research. This will create the conditions under which farmers, extension staff and researchers can learn from one another.
- Resources and mechanisms should be available to the extension systems to make it possible for farmers and service providers to influence and benefit from training and education programmes available in the agricultural sector (farmers, extension service providers, researchers, civil servants, agri-businessmen, etc.).

3.1.3 Agricultural research

Agricultural research provides an opportunity to bring creativity, scientific methods, and indigenous knowledge to bear upon the opportunities and problems faced in the agricultural sector. In doing so, research leads to the generation and adaptation of technological, sociological and economic innovations for use by farmers and other actors in the agricultural sector. Adoption of yield-enhancing technology and practices leads to increased productivity,

incomes and improved more sustainable livelihoods, including food security. Therefore, investments in agricultural research are also investments in growth. For the urban and rural poor, the results of agricultural research help to keep food affordable.

In many parts of Africa, realising the potential of agricultural research to reduce poverty has been elusive, despite the many achievements of agricultural research. This frustrating reality is evidenced in the prevalence of poverty, hunger and malnutrition, among farm families. At this juncture, harnessing the development and poverty-reducing potential of agriculture depends crucially upon establishing ways to ensure the relevance of agricultural research activities for the challenges facing poor and small-scale farmers now and in the future. FAAP recognises the important role that the public sector has to play, as well as the need to better integrate the private sector in the process, based on the following principles:

- Priorities are set through a transparent process of data collection and analysis, in particular gap analyses, with the objective of choosing research priorities at national, regional and continental levels that will be most likely to contribute to the achievement of the CAADP objective of 6% growth in agricultural output.
- End-users should be actively engaged in the processes of agricultural research priority setting, planning and managing the work programmes.
- Decision-making authority for planning and implementation, as well as financing, should be increasingly transferred from national level to lower levels of government (with farmers' and agri-business representation) so that stakeholders have a prominent voice and effectively influence in decision-making.
- More emphasis should be given to cross-country collaboration through the mechanism of the Subregional Research Organizations (SROs)—with a commitment to reduce redundancy created by every country having its own programme for every topic—and a commitment by countries to bring synergies and improve cost-effectiveness by pooling resources at SRO level to support regional programme approaches where spillovers and common issues extend beyond borders.
- While the public sector will, in most countries, continue to cover core agricultural research needs, publicly financed research should also be carried out by other research providers. Potential providers include universities, the private sector, specialized NGOs, and in some cases, farmers' organizations. These research providers can contribute in several ways: (i) contracting for specific research-related tasks; (ii) multi-year programmatic contract; and (iii) competitive grant schemes to support proposals in priority areas. Contracting out research services does not eliminate the role of the public sector. When research is contracted out, the government role becomes one of financing, quality assurance and also provision of training and information to the organizations or individuals who have been contracted to deliver research services.
- The costs of public agricultural research programmes are gradually shared between national and local governments, but also with farmers' associations, and agri-business.
- Establishment of national agricultural research strategies through participatory and multi-disciplinary processes—and their endorsement of these at national level through inclusion in the Poverty Reduction Strategies (PRSs).
- Greater emphasis should be given to human resource development and in the agricultural research system, through improved salaries, performance-related pay, better working conditions, and training opportunities.

3.1.4 Agricultural training and education

Agricultural training and education has a direct impact on agricultural productivity and on the performance of ancillary businesses and trade. It also stimulates implementation of knowledge-driven economic growth strategies and poverty reduction. Most African farmers only have access to primary education. This puts a premium on the quality of agricultural education in primary curricula. In addition, to make careers in farming and related branches of agriculture more attractive, there is also a need for adjusting the way agriculture is presented to students. The Farmers of the Future scheme developed by ICRAF for agroforestry teaching is an example of a viable way of addressing these issues and the concept should be extended more widely.

Farmers and pastoralists need the support of enabling extension and advisory services that take advantage of the most appropriate approaches, such as field days and Farmer Field Schools, community radio and village telecentres. In view of the distances and poor infrastructures, agricultural actors must also take advantage of modern information and communications technologies (ICTs) and distance learning methodologies, which empower farmers and allow them to demand for and access suitable knowledge.

The quality of tertiary agricultural education is critical because it determines the expertise and competence of scientists, professionals, technicians, teachers, and civil service and business leaders in all aspects of agriculture and related industries. It raises their capacities to access knowledge and adapt it to the prevailing circumstance, and to generate new knowledge and impart it to others. There is a consensus amongst recent studies, such as those by the Inter-Academy Council and the Commission for Africa, that urgent action must be taken to restore the quality of graduate and postgraduate agricultural education in Africa[3].

The number of private education institutions in Africa has increased dramatically but, their contributions are still marginal for agriculture in comparison to public institutions. Public support for strengthening agricultural education should promote a radically new approach to solving individual and institutional problems and maintaining global standards. To be effective it must, among other things:

- Create competitive working conditions that attract and retain the best brains which requires establishing standards for institutional reforms (in structure and programmes), as well as increased and better utilization of resources.
- Establish links between national, sub-regional, regional and global institutions.
- Make curricula more responsive to development needs.
- Improve access to locally relevant educational materials based on agricultural research experiences in Africa.
- Breakdown the institutional and programmatic separation between universities and NARIs which result in inefficient use of capacity and unproductive competition.
- Enhance the quality of the delivery of education by upgrading knowledge and skills of researchers and educators.
- Enhance teaching and training in technologies that could make faster progress in addressing African agricultural constraints, including biotechnology and ICT.

3. In line with the Millennium Declaration of the Association of African Universities and the 2001 Cape Town Declaration of ACP Ministers responsible for science and technology.

- Contextualise teaching in the management of risk and uncertainty related to smallholder agriculture, e.g., climate change, globalization, and international agreements and conventions.
- Prepare students better with the skills and tools they need for developing and implementing knowledge-based innovation systems.
- Improve integration of land use and environmental topics (including biodiversity, bio-energy, carbon sequestration, etc.).
- Enhance the enrolment of women, commensurate with their predominant role in the sector.
- Establish links in the education system from formal teaching to professional training.
- Create synergies among institutions and curricula in education, research and extension.
- Improve aspects of value adding, marketing and agri-business.

3.2 Increasing the scale of Africa's agricultural productivity investments

It is estimated that, in aggregate some US$2.5 billion is spent annually on Africa's agricultural productivity programmes (including public and private expenditures at local, national, sub-regional, and global levels). Most of this spending is concentrated in national programmes (Figure 5)—about half of which is financed by governments and the other half from external sources. A very small proportion of the total (roughly US$ 25 million) is administered at the sub-regional level by the SROs.

On average, African agricultural research and development intensity[4] is around 0.75 percent of agricultural GDP, which is less than a third of that of developed countries. However, there is a wide variation among African countries, with some investing at similar levels to developed countries. The majority only spend between 0.2 and 0.5 percent. The Inter-Academy Council recommends that African countries engage in a dramatic and sustained increase in agricultural research and development expenditure to reach at least 1.5 percent intensity by 2015.

Therefore, a substantial increase in investment for boosting Africa's agricultural productivity is being suggested, which would raise annual aggregate spending to at least US$4 billion by 2010. This would require African countries to increase their spending by one third over current levels to $3.25 billion. At the sub-regional and continental level, current investment levels of about US$25 million a year would need to increase to US$500 million. Global investments should be maintained at roughly $250 million. In order to reach and sustain these levels of investment, African countries must increase their own contributions to invest in agricultural productivity while developed countries, associated development agencies and international financing institutions will need to honour their commitment to substantially increase their support to these programmes.

African governments have committed to spending 10% of their national budgetary resources on agriculture. While increasing the level of investment in agriculture and on agricultural productivity programmes is important, the effectiveness of current as well as future investments must be ensured. The application of FAAP at all levels will entail re-examining current programmes and institutions to align them with FAAP objectives and principles. The first step is a data-intensive analysis of the current situation and an evaluation of the investments most

4. Measured as the total public spending in agricultural research and development, as a percentage of agricultural gross domestic product. Discussed in the Inter-Academy Council report on "Realizing the Promise and Potential of African Agriculture" (June 2004)

likely to contribute to the CAADP goal of 6% agricultural growth. Programmes supported by both existing and new resources need to align with FAAP and the results of this analysis to maximize efficiency and effectiveness.

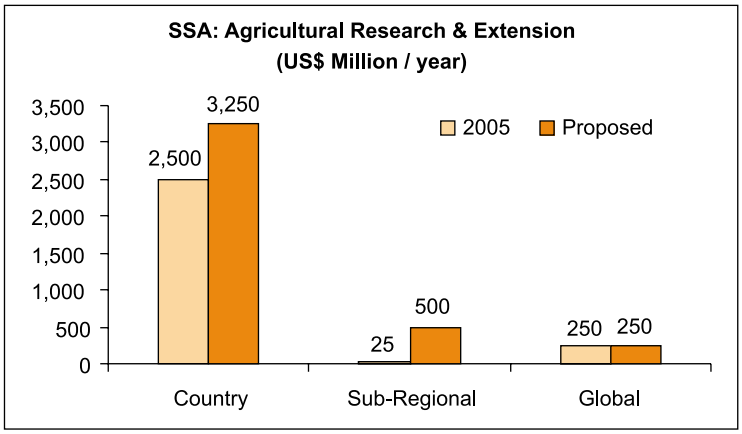


Figure 5. Actual and proposed agricultural research and extension investments in Sub-Saharan Africa.

3.3 Aligned and coordinated financial support

National support for agricultural productivity and growth programmes has been inadequate and often poorly and ineffectively distributed. Donor support to Africa has stepped in to fill the gap, but it has generally been fragmented and inadequately coordinated, mostly through financing of discrete projects. This has often resulted in creating parallel systems with separate management, procurement, staff recruitment and remuneration packages, as well as accounting and reporting. This way of doing business generally reduces efficiency and effectiveness, as well as sustainability. Fragmentation in support for Africa's agricultural productivity interventions and institutions can be reduced through the adoption of common mechanisms and procedures to align and coordinate development partners' support with national resources. Alignment and coordination will require that all partners work towards a common, agreed-upon agenda. They must also agree to mutual accountability than can be coordinated through common systems for monitoring and evaluation.

As the agricultural growth agenda takes hold and as countries move towards their commitments of funding their own agricultural programmes, the role of donors will decrease over time. The FAAP vision is one where agricultural growth reduces hunger and poverty but also contributes to national growth in GDP and thus increases in national resources, both public and private, available to fund agricultural growth programmes. Sustained investment in agricultural innovation is as crucial to a country as sustained investment in health services.

This shift towards alignment and coordination (sometimes called harmonization[5]), which is also supported by NEPAD, was formalised by donors and partner countries in the Paris

5. Harmonization: donors organize their activities in ways that maximize their collective efficacy. By promoting the use of common arrangements, harmonization may help increase effectiveness by focusing resources on a common, agreed upon objectives. Harmonization can increase aid efficiency by reducing, for donors and partners, the administrative burden of managing multiple activities.

   Alignment: donors base their support on partner countries' (or SROs') development strategies, systems and procedures. For partner countries or (SROs'), it means having sound and operational development policies, strategies and systems for managing aid. For donors, it means using partner countries policies, strategies, institutions and systems as the framework of reference for providing aid.

Declaration on Aid Effectiveness[6] which advocates that: (i) developing countries exercise effective leadership over their development policies, strategies, and to coordinate development actions; (ii) donor countries base their overall support on receiving countries' national development strategies, institutions, and procedures; (iii) donor countries work so that their actions are more harmonized, transparent, and collectively effective; (iv) all countries manage resources and improve decision-making for results; and (v) donor and developing countries pledge that they are mutually accountable for development results. Regarding agricultural and rural development, harmonization is also encouraged by the Global Platform for Rural Development (GDPRD)[7].

FAAP supports the agenda for harmonisation and alignment not only at country level, but also at sub-regional and continental level, as it will enhance the overall impact of government funding and development assistance to agricultural productivity activities by committing to joint objectives, as well as reducing transaction costs in planning, reporting and procurement. This should also contribute toward more comprehensive and sustained funding for activities based on national and sub-regional priorities.

In order to move towards harmonization, the following gradual changes are expected at national, sub-regional and continental levels:

- Moving from "project" mode (under which donors support specific activities) to programmatic support (possibly with notional earmarking) for most of the budget of recipient institutions (including recurrent costs).
- Adoption of common processes for strategic dialogue and for planning the activities to be supported by donors—these to be made consistent with the institutional schedules and time horizons of the recipient institutions.
- Common financial management procedures, monitoring and evaluation, reporting and review systems—consistent with those of the recipient institutions.
- Where feasible, adaptation of the procedures used in on-going and already committed operations to the above-described harmonized procedures.
- Establishment of multi-donor trust funds (basket funds) or pooling of funds in the accounts of recipient institutions, including unrestricted core funding (budget support).

Several donors are committed to implementing the Paris Declaration. However, achieving improved harmonization and alignment should be approached in a flexible way. At the country level, advocacy for improved harmonization and alignment will generally not be specific to agricultural productivity interventions, rather it will take place at sectoral or national levels. This would be reflected in country strategy, policy statements, institutional evolution, and programmes and, as such, would be discussed and reviewed at NEPAD Country Roundtable meetings. Similar commitments and review procedures would be expected at sub-regional and continental levels, receiving support under FAAP. It would however be highly desirable that a critical mass of harmonized support be reached at country and sub-regional levels.

6. See : http://www.aidharmonization.org

7. GDPRD is an initiative of development agencies and international financial institutions to improve donor collaboration and coordinated dialogue with partner countries. The GDPRD has three pillars: advocacy, shared learning and aid harmonization. (http://www.gdprd.org).

4 Using the FAAP

4.1. Overview

FAAP is intended as a tool to provide sound guidance as to the overall direction in which agricultural productivity interventions might best be steered to increase agricultural growth and to complement the other three pillars of CAADP. FAAP is also a tool to support the processes of steering institutions and their programmes in the directions advocated by FAAP. It is intended as an advocacy tool that can offer leaders increased access to political support, technical and methodological support, as well as financial support for their agricultural productivity-related policies, plans and institutions. This section suggests how FAAP can be used as a tool in this way in the context of the many interventions, which are expected to fall under the FAAP at national level, sub-regional level, and continental level.

4.2. National level

Africa's community of practice stressed the importance of addressing shortcomings in three areas in order to facilitate innovation—capacity building; farmer empowerment; and improving the effectiveness of agricultural research and extension services. They identified several specific interventions typically needed at the national level in each of these areas (these will be listed in Annexes to be finalized and published at a later date) and also identified guiding principles which, if embodied in the agricultural productivity programmes, would make them more effective (Section 3).

Most agricultural productivity programmes are appropriately situated at the national level. These include adaptive and applied research, extension (advisory) services, as well as primary and secondary education and related training programmes, and some of the post-secondary education programmes. While all of the these programmes draw upon knowledge and information, networking, technologies, science and technical cooperation provided from sub-regional, continental, or global programmes (see sections that follow), the primary interface between these programmes and farmers and agribusiness is the responsibility of national institutions and activities. Countries would not need to develop their own, separate agricultural productivity programme to access "FAAP-compliant" incremental resources. Rather, FAAP principles should be applied to ongoing and future interventions. They should also stimulate and influence institutional reforms, where appropriate.

In order that national programmes might successfully evolve in the FAAP directions, they should aspire to:

- Identify specific technical, sociological and economic limitations to agricultural productivity at national level.
- Emphasize responsiveness to market conditions and *economic justification* as key factors for determining technology generation, dissemination and adoption investments – ensuring that productivity is not pursued as an end in itself, but as a tool for improving profits and incomes.
- Promote knowledge sharing and development of synergies and feedback mechanisms to ensure there is sufficient *linkage between extension, research and education, and the private sector,* and greater collaboration in the overall technology generation, dissemination and adoption systems.
- Participation by all stakeholders in priority setting, programme planning and implementation.

National agricultural productivity institutions that are committed to developing their own policies, institutions and related strategies and plans in the directions suggested by FAAP will be able to attract political support, technical cooperation and financial support from their governments, SRO, FARA, NEPAD and the donors. Such commitment on the part of each country would be expected to be signalled in the context of government's PRSP and sectoral strategies concerned with agricultural productivity. Donors would be expected to align and coordinate their support for these national interventions in the manner suggested above. This could be signalled through an MoU between the government and agricultural donor groups, pledging joint support for the strategy, related institutional strengthening (including reform where appropriate), and activities.

4.3 Sub-regional level

Although many technology development activities are best managed at national level, some are better managed at a higher level of aggregation. Where agro-climatic, social, and economic conditions are similar across borders, cooperation at a sub-regional level for some aspects of agricultural productivity activities can improve efficiency and effectiveness by: allowing for costs and benefits that spill across borders to be internalized in planning and priority setting;

permitting economies of scale; making it possible to establish programmes with a minimum critical mass of staff and facilities; and avoid duplications.

Within the realm of agricultural productivity programmes, it is not only with regard to research that there is a role best played at the sub-regional level. There is a need for sub-regional institutions and programmes to offer and provide systematic support to national agricultural research, extension, and training/education, and farmer empowerment public and private institutions and their operations. This type of support consists of offering capacity building support and services, networking platforms and services, and facilitation of coordination between national programmes themselves, and coordination between national and international programmes. The list of specific recommendations in this regard will be included in the Annexes.

The programmes of the Sub-regional Research Organizations' (SROs), namely ASARECA, ARRINENA, CORAF, SADC-FANR[8] are examples of initiatives and institutions working at this level. The current mandates of the SROs are to: coordinate the research and development programmes of common interest to the NARSs in their sub-region; organize knowledge sharing and human resource development; and strengthen partnerships with CGIAR Centers and other advanced research institutions. The African member states bear some of the SROs' operating costs and provide substantial in-kind contributions in the form of facilities and human resources. In order that programmes such as these at the sub-regional level might successfully evolve in the FAAP directions, they will need to aspire to the following features (in addition to the features already listed for the national level in the preceding section):

- Identify specific technical, sociological and economic limitations to agricultural productivity at sub-regional level.
- Emphasize responsiveness to market conditions and *economic justification* as key factors for determining technology generation, dissemination and adoption investments—ensuring that productivity is not pursued as an end in itself, but as a tool for improving profits and incomes.
- Focus on activity areas for which the sub-region has a comparative advantage over national actions. Accordingly, and as dictated by *subsidiarity*, sub-regional programmes would not include activities more effectively supported at the national level or below.
- Employ a *pluralistic model* in regional programme implementation modalities to take advantage of the skills found within public and private institutions in the region, to retain flexibility, and to benefit from the accountability which comes from competition.
- Activities should be undertaken, to the extent possible, on a *cost-sharing* basis with national programmes and/or end users so that countries and stakeholders might exercise ownership and over sub-regional programmes.
- Play an advocacy and support role to member countries to increase resource allocation for agricultural productivity operations, and for improving the performance of concerned institutions (including reforms where appropriate).

8. ASARECA: the Association for Strengthening Agricultural Research in Eastern and Central Africa (http://www.asareca.org); CORAF/WECARD: Conseil ouest et centre africain pour la recherche et le développement agricole/West and Central African Council for Agricultural Research and Development (http://www.coraf.org); Southern African Development Community's Food Agriculture and Natural Resources Directorate (SADC-FANR) (http://www.sadc.int/english/fanr) ; and AARINENA: North African members of the Association of Agricultural Research Institutions in the Near East and North Africa (http://www.aarinena.org).

- Aiming for sustainability, the costs of sub-regional programmes should be increasingly shared by the countries of the sub-region, and in some cases by agri-business or other stakeholders and partners.

At sub-regional level, SROs will be able to seek support from member countries, FARA, NEPAD, RECs and donors for political, technical, methodological, and financial support to programmes that are developed along the lines advocated by the FAAP and its principles. Each SRO would be expected to prepare and adopt a long-term strategy and a medium-term operational plan for enhancing its agricultural productivity programme. Donors would be expected to align and coordinate their support along the lines suggested in Section 3.3. This would be signalled through an MoU between SROs and donors, pledging joint support for the strategy and related programmes.

4.4 Continental level

A role clearly exists at the continental level for an institution to advocate for investment in agricultural research and development, to provide networking services to national, sub-regional, and global institutions as regards to agricultural productivity issues in Africa. This includes the need to enhance the exchange of agricultural information and learning, to promote value-adding partnerships, where appropriate to facilitate and administrate capacity building services and programmes for the national and sub-regional institutions, to lead and facilitate discussions of strategy and priority setting at the continental level, and to implement activities designed to support specific elements of agricultural productivity programmes, related to the issues, constraints and needs highlighted above, for which economies of scale, need for specialization, or the existence of spillover effects dictates that administration be placed at the continental level.

In order for FARA to be successful in playing its role and to evolve in the directions suggested above, it will need to adopt the FAAP guiding principles— that is to say that FARA activities should display the following characteristics:

- Subsidiarity in locating decision making to encourage participation and ownership.
- FARA's intervention will add value to SRO programmes.
- There are economies of scale that can be derived at the continental level.
- The programmes will be planned and implemented in innovation systems contexts that involve actors across the whole value chain through multi-disciplinary, multi-institutional and multi-stakeholder approaches, ensuring that research and support services are appropriately contextualised and will have outcomes with high levels of ownership.
- Equitable access and contribution to information generation, sharing and dissemination.

At continental level, through commitment to developing itself in the directions advocated by FAAP, FARA will be able to seek political, technical, and financial support from member countries, SROs, NEPAD, African Union (AU), RECS, and donors. FARA would demonstrate its commitment to the directions outlined in FAAP through a strategic plan. Donors would prepare a joint programme of financial support for FARA's portfolio of programmes and would commit to this harmonized support through an MoU for this purpose.

4.5 International contributions

The CGIAR, non-CGIAR International agricultural research centers, regional agricultural research and development institutions including international NGOs and civil society organizations, the specialised offices of the AU, non-African advanced research institutions and other international programmes are making substantial contributions to African agricultural development through research and capacity-building. This will be further encouraged under FAAP, which will provide the additional benefit of greater consistency with African priorities and modes of operation. Adherence to FAAP guiding principles will also facilitate the determination of where and how the capacities of the international institutions can make the greatest contribution to African agricultural research and development in the context of national and regional strategies and the contributions of alternative service providers. The contributions will be, amongst others, in the following principal areas:

- Bringing best practices, data, knowledge and expertise from other regions of the world to bear on African issues.
- Providing research-based, relevant information and data for training, and curricula and course development.
- Providing specialized expertise in cutting-edge sciences including biosciences, social sciences and policy analysis.
- Creating critical mass and building capacity through collaborative research.
- Enabling cross-country and cross-continent replications and comparisons to inform African research and development.

5 Lesson learning and FAAP

5.1 FAAP and CAADP review processes

As discussed in the Introduction to this document, FAAP is a tool to assist in the implementation of the vision of CAADP (Chapter IV, in particular). AU-NEPAD is in the process developing a review process for CAADP. National institutions adhering to FAAP would participate in CAADP review processes that emerge at the national, sub-regional, and continental level. Programmes at the sub-regional level would fully participate in the CAADP review processes. FARA would participate in a CAADP-related review process for its initiatives at the continental level—in addition to assisting NEPAD in the overall review of Pillar IV of CAADP.

It is expected that reviews will be undertaken in 2010 and again in 2015 to determine the progress of CAADP Pillar IV. This timing corresponds to the objective of evaluating the contribution of agriculture toward meeting Millennium Development Goals (MDGs). The reviews will establish the status of agricultural innovation across the continent and recommend further improvements on the basis of experience of its utility and changing circumstances.

5.2 FAAP monitoring and evaluation

There are two parts to FAAP monitoring. The first step is monitoring FAAP implementation while the second step is monitoring and evaluating FAAP

outcomes and impacts after implementation has begun. Monitoring FAAP implementation will involve following the progress of national, subregional, and continental programmes as they move towards FAAP compliance. A monitoring and evaluation (M&E) system for FAAP will track the progress of FAAP-compliant African agricultural productivity related operations in contributing to the goals and objectives of the CAADP Pillar IV. Milestones will be set to track progress in institutional reforms and development (poverty focus, gender equity, governance and responsiveness, efficiency and financial sustainability) and with specific triggers for action by appropriate parties at the different levels.

Improving focus and efficiency in the generation and dissemination of agricultural technologies is a long-term undertaking that requires monitoring of a broad range of measures including investment inputs, production, trade, and impact on productivity and incomes. FAAP encourages, within the context of NEPAD/CAADP activities, the establishment of substantially strengthened and harmonized M&E capacities at country, sub-regional and continental levels. The SROs will take the lead at the subregional level in tracking the progress made by FAAP in contributing to the African agricultural growth agenda.

NEPAD/CAADP is organizing with the regional economic communities and their member countries to set up systems for peer review, monitoring and evaluation, and knowledge management. FARA will coordinate with these systems, but will also ensure that monitoring and evaluation of the issues specific to CAADP Pillar IV and FAAP are covered at the appropriate level.

Some indicative indicators that should be part of expanded M&E systems for agricultural innovation at national and sub-regional levels could include:

- Investment in agricultural research and dissemination systems by national governments, donors, the private sector, and NGOs.
- Trends in the value of agricultural production and productivity.
- Trends in the value of agricultural trade.
- Trends in farmer income and poverty measures.
- Indicators of institutional capacity and reform, including measurements for improvement in financial systems, audit, personnel management, procurement, etc.
- The number of new technologies made available for transfer.
- The number of farmers, processors, and others who have adopted new technologies.
- The area under new technologies/number of improved animals/volume of produce processed.
- Policy progress milestones.
- Policy, strategies and programmes in place to develop/disseminate technologies with farmer participation.
- The number of donors coordinating and harmonizing their support under FAAP.

This list of indicator areas is not exhaustive, and details for each type of indicator and how it will be collected will need to be fleshed out as part of the FAAP at the national, subregional, and continental levels. NEPAD, FARA, RECs, NARS, and SROs will collaborate in developing indicators that are consistent and comparable.

6 Conclusion and follow-up

FAAP will be an advocacy tool available to all stakeholders in African agricultural research, technology dissemination and adoption for achieving the goals and objectives of CAADP Pillar IV.

It provides the principles and guidelines that will, through their application, improve the complementarity of diverse contributions to national and sub-regional priorities and the collective output of all actors.

FAAP will strengthen Africa's capacity for agricultural innovation that will enable agriculture to be an engine for development by providing a framework for improved institutional arrangements, especially in respect of capacity building, empowering farmers and strengthening farmers' support services; as well as by promoting resource alignment and increased funding.

About FARA

FARA is the Forum for Agricultural Research in Africa, an umbrella organization bringing together and forming coalitions of major stakeholders in agricultural research and development in Africa.

The **vision** of FARA is for African agriculture to become vibrant and competitive in the international market, growing at a rate of at least 6% per annum by the year 2020.

The **mission** of FARA is to enhance and add value to the effectiveness and efficiency of agricultural research systems in Africa that will contribute to agricultural development, economic growth and sustainable use of natural resources. FARA complements the innovative activities of national, international and sub-regional research institutions to deliver more responsive and effective services to its stakeholders. It plays advocacy and coordination roles for agricultural research for development.

FARA is the technical arm of the African Union on rural economy and agricultural development and New Partnership for Africa's Development (NEPAD) to implement the fourth pillar of Comprehensive African Agricultural Development Programme (CAADP), involving agricultural research, technology dissemination and uptake. FARA identified five requirements to enhance continental impact on livelihoods and economic development:

- A framework for reform and investment in agricultural resiearch and harmonization of actions and actors of ARD in Africa, i.e., the Framework for African Agricultural Productivity (FAAP).
- A new innovation systems approach to agricultural research for development, i.e., the Sub-Saharan Africa Challenge Programme (SSA CP).
- The human capacity to implement, internalise and upscale new approaches to researchers, change agents, processors, marketers, and not the least, policy makers, i.e., Building African Scientific and Institutional Capacities (BASIC).
- Immediate applications that can make a difference and restore credibility in agricultural development, i.e., Disseminating New Agricultural Technologies in Africa (DONATA).
- African scientists better able to retrieve and contribute to global knowledge of agricultural science & development, i.e., Regional Agricultural Information and Learning Systems (RAILS).

These programmes respond to FARA's primary functions, which are advocacy of the role of agricultural research, promotion of functional partnerships, and accelerating sharing and exchange of knowledge.

FARA donors in 2005 were The African Development Bank, The Canadian International Development Agency, European Commission, the Governments of the Netherlands, Norway, United Kingdom, Italy, Ireland, Germany and France, the Consultative Group on International Agricultural Research, the Rockefeller Foundation, Bill and Melinda Gates Foundation, FAO, the World Bank, and the United States Agency for International Development.