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The policy-change-cycle framework: Experiences with the harmonization of seed policies, laws and regulations in Eastern and Central Africa

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Abstract

The project entitled "Harmonization of Seed Policies, Laws, Regulations and Procedures in Eastern and Central Africa to facilitate the transfer of germplasm and seed trade across the national borders was initiated by ASARECA/ECAPAPA. In this paper, we demonstrate our experiences and lessons learned in using the above conceptual framework in effecting policy change in the activities of ECAPAPA.The Programme adopted the policy change cycle conceptual framework in effecting the policy, regulatory and procedural changes needed. The policy change framework recognizes four distinct, but interrelated phases that one needs to pursue to achieve a policy change. These included; policy data collection, policy data analysis, policy dialogue, and policy action to achieve the desired results. The point of entry in addressing a particular policy issue depends on the existing state of knowledge on that particular issue. Moreover, in policy data collection and analysis, the policy cycle framework distinguishes between legislative (which needs changes in laws by policy makers) and procedural issues, which can be done at the technocrat level. This distinction is necessary as it determines what approach is taken at the policy dialogue and policy action phases of the framework. Key values observed in the process involve participatory, inclusiveness, transparency, and private-public sectors partnerships. We also respect the fact that for any effective policy change to occur, there is need to take into account the technical (science-based information) political (consensus building) and legislative (guide against back trackers and defaulters).

Key Words: Eastern and central Africa (ECA), Policy change cycle, rationalization and harmonization, seed sector

Introduction

In Africa,effective policies for achieving economic growth, reducing poverty, promoting gender equity, and emphasizing sound management of natural resources are urgently needed. Unfortunately, decision makers in most African countries often lack the information, opportunity for informed dialogues, and institutional capacity that could help them develop appropriate policies to achieve these goals. African leaders and policy makers have remarked on their lack of opportunity to conduct regional discussions on agricultural and food policy issues.

Sub-Saharan Africa is the only region where food insecurity and child malnutrition continue to increase. For example, 19 million cases were registred in 1970 while in 2004, 33 million cases wereregistred; the number of undernourished pre-school children in Sub-Saharan Africa is expected to increase to 39-40 million by 2020. More than half of the Sub-Saharan African population is below the poverty line spending less than US$ 1 per day. Per capita agricultural production has decreased by 13 percent since the late 1960s. Cereal yields, at about one ton per hectare, have increased very little during the last 40 years. Maize yields in Sub-Saharan Africa are now only 44 percent of the average yields in developing countries. Most of the past production increase in Sub-Saharan Africa has resulted from expanded cultivated areas at the expense of natural resources (land, forest, wildlife, and biodiversity). Rapidly increasing health problems including HIV/AIDS and malaria are adding to the deteriorating food security and nutrition situation, and to the falling level of human well-being (ECAPAPA , 2003).

These atroubling trends can be broken partly by having credible policy analyses within the region. Appropriate action by governments, civil society, and the private sector can assist citizens of Sub-Saharan Africa to improve their livelihood. Expanded public and private investment in agriculture, nutrition, health care, education, and infrastructure accompanied by appropriate policies and technology is urgently needed. Biological and policy research is critical to generate the knowledge and technology needed for successful action.

Government policy, technology, and institutions are of critical importance in efforts to assure food security in Sub-Saharan Africa in a manner compatible with sustainable management of natural resources. To be successful, action by governments must be based on a comprehensive understanding of the interactions among technology, policy, and institutions. It is most likely that the best technology can fail to achieve its social objectives if the policies are

inappropriate or if appropriate institutions are missing. Lack of investments in rural infrastructure, low-price policies for agricultural products and high prices for fertilizers and other inputs, poorly functioning markets, unclear property rights are examples of policies and institutions that may render new technology useless for farming community.

In order to design and implement appropriate policies and institutions, decision makers must have access to relevant and timely knowledge about policy options and their likely consequences. It is the role of policy research to generate such knowledge. The specific knowledge needs and related research priorities vary across countries and over time.

Because of the above observation, the Committee of Directors (CD) of the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA) decided, in 1997, to establish the Eastern and Central Africa Programme for Agricultural Policy Analysis (ECAPAPA).
The ASARECA's CD observed that:

1. Agricultural policies are restricting the optimum performance of the agricultural sector, i.e., limiting its contribution to sustainable social and economic development, and poverty alleviation;
2. Agricultural policies inhibit the effectiveness of agricultural research by offering little support and restricting the motivation for producers to use improved information and technical innovations;
3. Agricultural policies lack the micro-economic perspectives to ensure that the interests of the intended beneficiary populations are central and that policies are environmentally sustainable and economically efficient.
4. The CD also recognized that agricultural research was making, a weak contribution to agricultural research implementation, and had no contribution to improvement of agricultural policies. This takes place through:
5. Agricultural research defining its own research policies and agenda that are usually independent from current agricultural policies;
6. Agricultural research was staying out of the policy dialogue and pursuing no engagement of researchers in tasks leading to the definition of improved agricultural research knowledge and micro-perspectives about agricultural sector and its potential.

ECAPAPA was thus established to (i) address the need to improve agricultural policy analysis in the region, and (ii) bring the National Agricultural Research Systems (NARS) into research and policy analyses processes. ECAPAPA seeks to create an enabling policy environment to facilitate agricultural transformation in the Eastern and Central Africa region through policy analyses, capacity building and information exchange.

Problem statement

The motive for the rationalization and harmonization of seed policies, laws, regulations and procedures is based on the fact that the seed industry in the region is facing many different standards and regulations in each country, which are costly to meet. These high costs, coupled with the relatively low level of effective demand, make it unprofitable for either local or international seed companies to make the investment required to provide the quantity, quality and variety of seed needed to support an expanding agricultural base in Eastern and Central Africa.

Non-tariff barriers means laws, regulations, administrative and technical requirements other than tariffs imposed by a Partner State whose effect is to impede trade (East African Community 2004). Technical standards, regulations, rules and procedures for products can facilitate and enhance trade. For food products, consumers can be assured that food purchased will be safe, thus increase confidence in imported products. On the other hand, such standards/ regulations/procedures can become barriers to trade if they place unjustifiably discriminatory demands on importers/ exporters or even on domestic producers.

Area of Activity

The Seed Project was initiated in September 1999 in the three East African countries (Kenya, Tanzania and Uganda), which served as pilot phase countries. In 2001, the project was subsequently expanded to incorporate other countries i.e. Burundi, Eritrea, Ethiopia, Rwanda and Sudan. The third and final group of ASARECA countries, namely the Democratic Republic of Congo and Madagascar were brought into the project in 2003.

Methodology

In order to address the policy deficiencies in the seed subsector mentioned above, ECAPAPA adopted the Policy Change Cycle Framework approach. As illustrated in Figure 1, this Framework aims to pursue a policy change process through a process of policy data collection, the analysis of the data collected which then leads to a policy dialogue process of key stakeholders. The intent is that policy dialogue would lead to policy action.

The Policy Change Cycle could be viewed as a model for multi-stakeholder, multi-disciplinary and cross-institutional approach for transforming research recommendations into policy actions. It thus acts as a loop (bridge) between agricultural policy research and practice. Seed policies, regulations and procedures are analyzed for their efficiency, harmonizable elements and implications to international treaties.

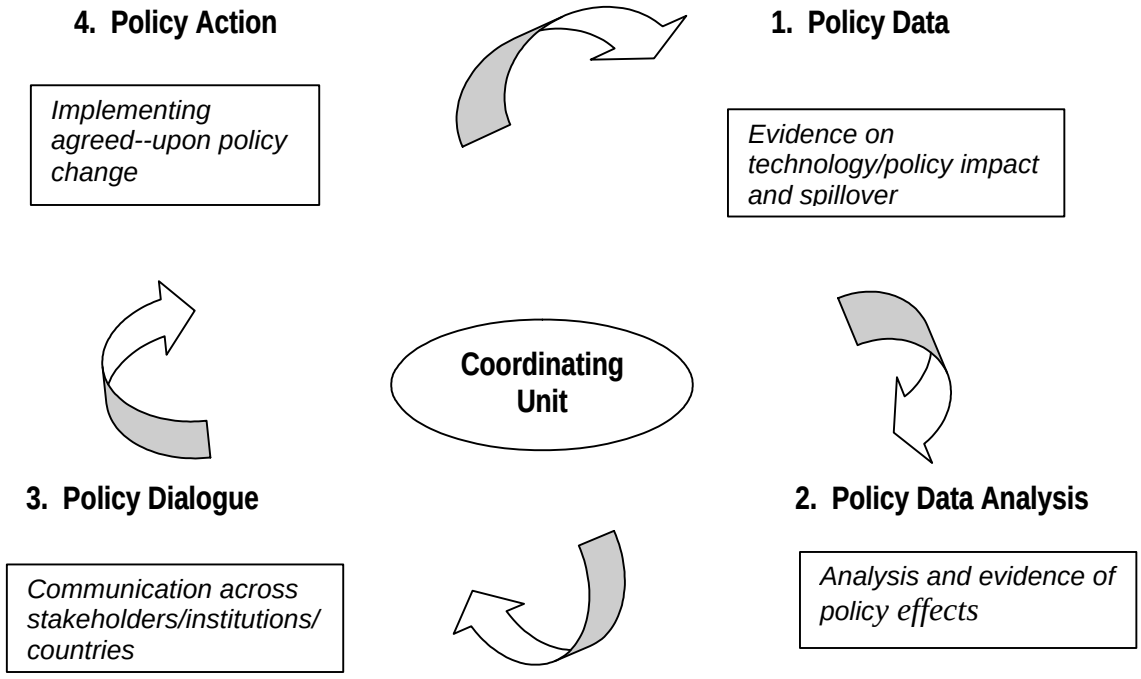

Figure 1: The Policy Change Cycle

Policy data collection

National experts (consultants), which in ASARECA/ ECAPAPA are referred to as National Resource Persons (NRPs) were engaged to carry out in-country data collection and data analysis. The NRPs were backstopped by a Regional Resource Person (RRP) among whose terms of reference was a regional synthesis of the individual country reports and to help identify areas, which were potentially "harmonizable". The data collected, included quantitative data related to types and quantities of seed produced, seed traded (imports and exports). Also collected were qualitative data and information relating to the process of variety evaluation, release and registration, procedures and regulations for seed certification and seed import and export. Policies, laws, regulations and procedures related to all the above were also collected.

Policy data analysis

Policy data analysis means that key central tendencies of various attributes have been identified through an analytic process and that the gains and losses (winners and losers) with regard to various scenarios are determined. Also a set of policy options will have to be identified. Policy issues are regarded and counted as analyzed when these have been approved through a peer review process. The analysis process must be thorough and scientific for it to be able to positively guide the policy dialogue phase. Our experience indicates that it is quite helpful to make the analysis process as participatory as possible to ensure a soft-landing during the dialogue phase. The analysis phase also distinguished between issues and recommendations, which are legislative, regulatory or administrative/simply procedural. The national seed laws, regulations and standards were therefore reviewed to establish the extent to which they accelerate or decelerate agricultural sector growth through the seed sector. Part of the review involved identifying missing laws and regulations limiting seed production and commercialization in light of the current global developments.

Policy dialogue

Policy dialogue involved ECAPAPA creating fora where all the stakeholders of the seed sub-sector discuss the recommendations of the analysis. The fora were at two levels: national and regional. The national policy fora focused on areas of rationalization and harmonization, while the regional fora focussed on issues, which could be harmonized across the countries. Rationalization means organizing to do business differently in order to attain higher levels of efficiency within the country, while harmonization means reaching a consensus on a unified set of rules, laws, regulations and procedures across national borders to facilitate easy flow of goods and services.

The national fora were organized in the form of national consultative workshops, which brought together stakeholders from both the public and private sectors. The major objectives of the national consultations were to:

a) Review and validate NRP's reports
b) Obtain comments and additional issues to consider
c) Make recommendations for rationalization
d) Make recommendations for harmonization.

The national consultative workshops were followed by national workshops, which were confined to decision-making level participants from the public and private sector.

The national workshops were followed by two regional meetings. The meetings addressed the five areas identified for harmonization and put a regional coordinating mechanism in place for implementing and monitoring agreements reached in the two regional workshops. The mechanism was in the form of a Seed Regional Working Group comprising representatives of:

- Variety Evaluation, Release and Registration
- National Seed Certification Authority
- Phytosanitary Office, and
- Private Sector (through the National Seed Trade Associations).

Policy action

Policy action is that part of the policy change cycle, which involves the translation of agreed recommendations in laws, regulations and procedures on the ground. Due to the nature of what it takes to do policy action, ECAPAPA in defining its strategic objective and levels of accountability does not hold itself accountable to delivering policy action. However, through various mechanisms ECAPAPA facilitates this process and will claim credit when action occurs. One of the key mechanisms for policy action is facilitating the formation and/or strengthening of national seed trade associations.

Results

Several distinct results have been obtained from this initiative along the major seed areas. ASARECA/ECAPAPA identified five specific areas to be addressed, namely;

(i) Variety evaluation, release and registration
(ii) Seed certification
(iii) Phytosanitary regulations
(iv) Plant variety protection
(v) Laws and regulations governing seed trade development

Variety evaluation, release and registration

For variety evaluation, release and registration, a consensus was reached that for both locally produced and introduced varieties, applicants will enter materials intended for release for at least one main season. These will regionally be reffered to as variety performance trials (VPTs). However, sufficient data from previous testing stages (advanced yield trials) will have to be provided by the breeder. The implication of this agreement is that seed companies can do advanced multilocational testing in relevant ecological zones anywhere in East Africa followed by entering them in VPTs. This should attract more seed companies to the region because of expanded market. Before this agreement, the number of seasons for release of varieties after they enter VPTs was three. On-farm trials was recommended for all countries but recommended that it should be done concurrently with VPT so that the trials do not claim extra time on release of varieties. The reduction of time for release of new varieties from three years to 1 season, implies more readily available new planting materials to farmers per unit time.

Another result of the project was the agreement to standardize national variety testing procedures across the three countries on crop-by-crop basis. This facilitates reciprocal regional recognition of variety testing data and implementation of regional VPTs.

Although the national certifying agencies (NCAs) will bear the overall responsibility for the national evaluation trials, it was agreed that they (NCAs) can accredit suitable institutions, companies or seed trade associations or individuals to carry out VPTs. This agreement clearly indicates the increased acceptance of the role of the private sector in seed evaluation and release. Because public institutions are usually under-funded and under-staffed, the accreditation arrangement will help reduce the funding and staffing burden and expedite the variety evaluation process and hence availability of new varieties.

The project resulted in the standardization of the variety release committees and made them more inclusive in terms of stakeholders. Previously, the Variety Release Committees (VRCs) varied in numbers, function, composition of membership, and frequency of meetings across the countries. It was greed that the NCAs with some technical assistance from the applicant, the national seed trade association and an extension specialist will monitor and consider National Variety Performance Trials (NVPT) and VPT results for consideration by the National Variety Release Committee (NVRC) which now is the only committee whose composition has also been standardized across the countries. The intent here is to increase transparency in participation, reduce on cost of meetings and bring flexibility into the frequency of meetings. All these factors should make the NVRC more effective and therefore speed up the release of varieties.

Finally it was agreed that a regional variety list/catalogue should be established from the national variety lists/ catalogue. The protocols for both the national as well as the regional lists/catalogue were defined. The regional variety list should lead to increased availability of information on new varieties available in the region.

Seed certification

Under seed certification, the project secured an agreement on commonalities on different crops, which should hasten seed movement and availability across borders. Doubts about seed in the voluntary class in one country and compulsory class in another are removed. Standards (both field and laboratory) for 10 most economically important crops, i.e. maize, beans, rice, wheat, Irish Potato, sorghum, cassava, soybean, sunflower and groundnuts were harmonized. Having common rules defined, increases transparency, reduces the time seed will take to move from one point to the next and helps increase the number of entrants into the seed industry, resulting in increased seed availability.

Before the ASARECA project, there were eight different seed classes in the three countries causing considerable

confusion in germplasm exchange and trade in seed. As a result of the project, four seed classes were accepted across the three countries: breeders, basic, certified (first and second generations) and standard. The reduction from eight to four seed classes helped make the seed language common and easy. This will facilitate faster movement of seed for processing and for trading and will improve seed availability across the countries.

The stakeholders of the seed sector agreed on accrediting institutions, seed companies and individuals to carry out certification on behalf on national certifying agencies. The accreditation procedures were also defined. This agreement should lead to more efficient use of human resources available in the seed sector. Besides, it will also accelerate the process of certification, and thus making seed more available.

Due to the absence of a common seed tag among the three East African countries, there were numerous questions and delays as seed moved across borders. The project enabled agreement to be reached on a common seed tag for the three countries. The colour and content for each seed class was also agreed upon. The next step is a designer to come up with prototypes of the tags for final decision-making. The common seed tag should facilitate faster movement of bulk seed and also seed trading.

Also, the three countries agreed to establish an interagency certification scheme. This will allow seed companies in the three countries to move seed freely across borders, make use of specific country advantages in the production of seed and move it in bulk across boundaries for further processing. In effect, it would result in more efficient use of land and human resources and hence facilitate increased availability of seed to farmers.

Prior to the project, the three countries had different ratings, confidence and understanding of the roles of the informal seed sector. The informal seed sector was accepted as an integral part of the wide seed sector. It has a big role in ensuring seed availability to and seed choice by farmers. It was agreed that the informal seed sector should continue to be assisted by the formal sector so that it can eventually graduate into a formal one. Non Governmental Organisations working on emergency seed supply should, wherever possible, be lobbied to support development of formal seed sector by buying seed from registered seed companies.

Phytosanitary issues

Before the project, some countries, in particular Kenya and Uganda, were still using the outdated 7th Non-Legal Draft of the Plant Protection Order of 1972 proposed by the East African Technical Committee as the basis for issuing import permits. The project brought the three countries to agree to use the revised Food and Agriculture Organisation's pest risk analysis (PRA) and the CABI database procedures, as was the case in Tanzania. Using the PRA procedures, the number of quarantine pests within EAC for the 10 selected crops was reduced from 33 to three. The three are African Cassava Mosaic Virus, *Mycospharella zea maydis and Xanthomonas transluscens*. A common list of mid- to high-risk quarantine pests was also established based on scientific evidence. A provision was made in the agreement for periodic updating of restricted and non-restricted pests. This agreement has resulted in faster issuing of import permits and more seed movement across borders of the three countries.

The three countries also agreed to establish a standard minimum pest information system based on literature, capacity in information systems, training, compulsory notification of outbreaks and establishment and publication of pest status in the region. This would be coupled with increased public awareness of phytosanitary measures using pamphlets, leaflets, posters, in-flight announcement and farmer training along the borders. Immigration and customs officers would also be sensitized on the issues. It was also agreed to establish minimum facilities at high-risk entry point and empower entry and post entry staff to inspect and quarantine. It was also recommended that Tanzania and Uganda be encouraged to pursue membership of the International Plant Protection Convention. It is expected that all these efforts should minimize policing, pest entry and spread within the region.

Plant variety protection

Agreements were also reached in relation to the issues of plant variety protection (PVP). Among the three countries, only Kenya had legislation on PVP at the beginning of the project. Tanzania and Uganda did not have. The three countries agreed to establish national PVP laws to promote crop improvement by both the private and public breeders and institutions. Each country was encouraged to develop a suitable system of PVP based on cross-referencing on international and regional PVP model laws. This is more so in view of the fact that the World Trade Organization under TRIPS (Trade-Related Intellectual Property Rights), to which all the three countries are signatories, requires that each country establishes a PVP system by 2005. The countries also agreed to establish a regional plant breeders' rights committee to work under the East African Community. The concept of essentially derived varieties should be recognized and provided for in the national PVP laws. Establishing PVP laws will promote crop improvement by both public and private breeders and institutions because of the built-in reward system.

Export and import procedures and documentation

The number, type, source and format of documentation were different in all the three countries. The three countries agreed to standardize import and export documentation and procedures that will require plant import permit, phytosanitary certificate from source, quality certificate and customs clearance. Public awareness campaigns would also be conducted at border posts. Standardized procedures will ease and increase the rate of seed movement across borders thus saving considerable time.

In addition, a number of amendments to old legislations and enactment of new legislations were made with the facilitation of the project.

The outcomes of the project could be summarized as follows:

(i) More seed dealers registered for example in Uganda the number increased from about 5 in 1999 to 15, in Tanzania from 5 to 15 and in Kenya from 17 in 1995 to 40 in 2002

(ii) Volumes of seed traded increased in all the three countries.

(iii) More varieties released: In Kenya, 7 varieties from KARI and 12 from private seed companies were released in September 2002, while several more varieties were released in November 2002. (This was the first time two variety releases took place in one single year)

Also, the fact that the project facilitated fora for the public and private sectors to meet and view themselves as partners in the development of the seed sector. Hitherto, there had been some impression that the public sector is the decision maker and the leader and that theprivate sector being the follower. The project has greatly diffused this distinction. As a result the private sector will participate in a number of functions in the seed sector such as certification of seed varieties, which was hitherto only performed by the public sector.

The project also provided an opportunity for scientists, public and private officials working in the three countries in the same industry to meet, know each other and exchange experiences. This helped to build trust amongst themselves, which is a resource for subsequent regional initiatives in the same and related sectors.

Lessons learnt

The project has generated significant skills and lessons on how to work with a multi-disciplinary set of scientists and policy makers with diverse backgrounds and orientation. Interesting and also challenging in this case, is the experience gained in the process of reaching a consensus harmonization of seed policies and regulations for the region through a technical, political and legislative process based on discussions by wide and diverse groups of participants i.e. breeders, pathologists, seed technologists, legal draughtsmen, traders, government technocrats and politicians.

One of the lessons learned in the very early stages of the process was the importance of the private sector, in particular the seed trade associations in the development of the seed industry. For this reason, a lot of emphasis has been placed in facilitating the establishment and strengthening of national seed trade associations. Indeed, a regional association to bring the national associations together is being proposed. Valuable lessons were learnt in the creation and steering of public-private partnerships.

The project also illustrated the necessity of using scientific based evidence to argue for policy change without ignoring the political reality embedded within the policy making process.

Conclusions

It is important to realize that the policy change cycle framework is a process, which is technical, political and legislative. All these steps need to be given utmost consideration in the process. The optimal outcomes must, and will be based on trade-offs between the technical issues and interests of stakeholders. Although policy action could lead to the putting in place good policies, effective implementation of those policies is essential to ensure that those policies deliver the intended results. Formation of interest groups such as stakeholders association will be fundamental in this regard.

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