The Kenya National Federation of Agricultural Producers (KENFAP) is the national partner in the Collaborative Research under the Empowering Smallholder in Markets (ESFIM) programme. ESFIM activities fit in and were anchored to KENFAP’s strategic aim of “fostering the interests of smallholder farmers by stimulating beneficial policy changes through lobby and advocacy...”. This objective requires the active engagement of KENFAP with the Government to create and maintain an enabling environment for agricultural sector.
KENFAP is a non-political, not-for-profit, democratic federation of Kenyan farmers. It is an umbrella association of farmer organisations representing the interests of over 1.8 million farming families. It was established in 1946 as the Kenya National Farmers Union (KNFU), which at that time represented only large-scale white farmers. In 1973, KNFU opened up its membership to smallholder farmers and consequently grew to become a powerful farmer organisation. Implementation of economic reforms in Kenya in 1980-1997 adversely affected the fortunes of many commercial farmers, hence weakening the Union. In response, the KNFU underwent institutional transformation in 2003, becoming a federation of farmer organisations (KENFAP), which operates through networks at different levels – local, regional and national. KENFAP membership consists of 36 apex Commodity Associations, 16 Co-operative Societies and other corporate farming entities. Its members are found in 43 of the 47 counties in Kenya. Smallholder farmers predominate within KENFAP, and many of these are mobilised around 5,000 farmers’ groups with an average size of 30 to 50 members.

KENFAP’s main mission is “to progressively influence change in the agricultural sector environments and promote agribusiness through targeted interventions”. Central to its pursuit of this mission are lobbying and advocacy on agricultural policy and providing services to the farm sector. It has developed internal structures and strategies to enable it to pursue this objective, including establishing a four-tier administrative structure that facilitates collection of data and information from its local, district and national level structures. KENFAP has also formed strategic alliances at national and international levels to enhance its advocacy role. It is a member of the Kenya Private Sector Alliance (KEPSA), the Eastern Africa Farmers Federation (EAFF) and the International Land Coalition (ILC). The Federation has the following dissemination vehicles: a monthly magazine (The Farmers Voice); a bi-weekly E-bulletin; published profiles and brochures for particular events; and a website (www.kenfap.org).

KENFAP was one of the few partner national farmer organisations (NFOs) to receive funding from Agriterra for Collaborative Research activities in 2009. Initially, KENFAP prioritised only one policy research issue, the assessment of government interventions in input and output markets for maize, the most important staple grain in Kenya. However, when the project funding situation improved through co-financing by the Netherlands Government, it was possible for KENFAP to broaden its agenda and include issues related to the development of warehouse receipt systems (WRS) as well as examine the challenges facing smallholder farmers in Kenya in accessing agricultural finance.

Development challenge

The contribution of agriculture to Kenya’s GDP is low – it stood at 19.4 per cent in 2010, compared to other East African countries such as Uganda (23.9 per cent) and Tanzania (27.1 per cent). The services sector dominates the economy, accounting for 66.8 per cent of GDP in 2010. However, the agricultural sector accounts for 65 per cent of the country’s merchandise exports and 75 per cent of employment and is, therefore, of strategic importance in the pursuit of Kenya’s growth and poverty reduction goals. Although tea, coffee and horticultural products dominate agricultural exports, the production of maize, by far the most important staple crop, has significant repercussions for food security and internal politics. According to official data from the Kenya National Bureau of Statistics, maize output in Kenya was...
steady in the 2000s but declined sharply from the 2008/09 season as a result of post-election conflicts (Table 9). Output has yet to recover to levels achieved in the 2006/07 season, implying that the country relies even more on imports to meet domestic consumption needs.

### TABLE 9 OUTPUT OF MAJOR CROPS IN KENYA 2005-2010

<table>
<thead>
<tr>
<th>CROP</th>
<th>TOTAL PRODUCTION PER SEASON (TONNES)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2005/06</td>
</tr>
<tr>
<td>Tea</td>
<td>295,791</td>
</tr>
<tr>
<td>Coffee</td>
<td>47,995</td>
</tr>
<tr>
<td>Horticultural products</td>
<td>186,356</td>
</tr>
<tr>
<td>Maize</td>
<td>2,935,193</td>
</tr>
</tbody>
</table>


Smallholder farmers account for over 70 per cent of the maize output in Kenya. They tend to be vulnerable to economic and climatic shocks and lack the means to mitigate these risks, except by adopting informal coping strategies such as diversifying their production and/or their sources of livelihood by engaging in non-farm rural economic activities. It is the vulnerability of these smallholder farmers to these setbacks, including policy-induced changes, which influenced the research priorities for KENFAP.

During the pre-planting period, most smallholder farmers lack access to financing or appropriately-packaged financial services. This makes it difficult for them to obtain inputs required to increase output and productivity. To address this problem, particularly after the post-election crisis, when there was a need to quickly promote increased grain production, the Government of Kenya introduced the National Acceleration Agricultural Inputs Access Programme (NAAIAP) under which subsidised inputs were distributed to smallholder farmers. Issues regarding the effective outreach to target farmers, as well as sustainability of the programme emerged, requiring an investigation of evidence-based views of farmers about the programme.

Smallholder farmers in Kenya also face major post-harvest difficulties. Unlike the well-structured formal marketing systems for agricultural export crops, the grain trading system in Kenya is fragmented and un-coordinated. The informal grain marketing system, which is accessible to smallholder farmers, lacks suitable grain storage facilities and, as a result, post-harvest losses tend to be high. Poor rural transport infrastructure adds to marketing costs for smallholder farmers. In addition, difficulties in assembling produce from a large number of farmers limits access to formal markets, which are more remunerative. The formal grain marketing system is dominated by the parastatal National Cereals and Produce Board (NCPB), in terms of grain storage facilities. Ad hoc intervention in grain markets is quite common in Kenya. The NCPB, which is responsible for managing the National Strategic Grain Reserves (SGR), is also considered as a “buyer of last resort”. The NCPB often faces funding constraints in its grain procurement programme, as it depends for a large part on financial support from the public treasury. The commercial banks which are engaged in inventory financing in Kenya appear unwilling to extend such facilities to NCPB.

The effect of inefficiencies in the grain output markets is that most smallholder farmers are often compelled to sell the bulk of their maize during the harvest season when prices are very low, as selling their produce is the only means by which they can obtain cash for household needs. It is estimated that over 50 per cent of maize output by smallholder farmers in Kenya is marketed immediately after harvest.
Furthermore, farmers are poorly organised, making it difficult to effectively bulk their crop production, which would enable them to meet the minimum volume requirements that prevail in more remunerative formal markets dominated by large-scale traders and processing companies. They also lack the capacity to carry out primary-level quality assurance, creating additional barriers in accessing formal markets. The consequence of these problems is a weakening of the bargaining position of most smallholder farmers. Consequently, farmers’ margins tend to be constricted, thereby reducing incentives for them to invest in yield-enhancing inputs.

There have been efforts in the region, including in Ethiopia, Tanzania and Uganda as well as in Kenya itself, to promote innovative market institutions such as warehouse receipt systems (WRS), with the aim of reducing uncertainty in crop output markets, especially for grains. The outcome of such initiatives across the region has been variable. It is therefore important that, in championing such innovations, KENFAP and other stakeholders representing farmers’ interests should understand the context in which such systems can be successfully developed and also be accessible to smallholder farmers. Similar motivations underpinned the interest of KENFAP in studying developments in the financial sector in Kenya to identify opportunities to promote innovations which will enhance farmers’ access to finance.

Collaborative research process

Based on the core methodology for ESFIM-funded research activities, the following steps were to be followed:

1. National farmer organisations (NFOs) such as KENFAP were to mobilise their members and determine research priorities through a consultation process, the final phase of which involves organising a national workshops. This was done in Kenya.

2. KENFAP, with technical advisory inputs from the AGRINATURE research institute (NRI – Natural Resources Institute), was to define terms of reference (TORs) for the prioritised research topics. Again, this was done.

3. Local consultants, either individuals or preferably a local research institution were to be contracted by the national farmer organisation in consultation with NRI, to undertake the studies in accordance with the defined TORs. However, due to the funding constraints, the involvement of consultants in the study process was substantially scaled down. KENFAP staff undertook most of the research activities, including carrying out a desk review of existing literature, developing research instruments as well as collecting and analysing data. NRI provided advisory and editorial assistance to KENFAP. The involvement of local consultants was limited to facilitation of validation workshops and participation in workshops, during which they provided specific comments.

4. Validation workshops were to be organised to present the outcome of the studies to members of KENFAP and other key stakeholders for their views. Participants were to include representatives of KENFAP at different levels, policymakers, private sector players and local research organisations. This was done.

5. Based on the outcome of the validation workshops, the researchers were to revise their reports as needed, and then KENFAP was to prepare policy advocacy papers and engage in policy dialogue with Government using existing policy platforms. The position papers were produced by KENFAP, which continues to engage with Government on the identified issues.
Following a review of agricultural market dynamics in Kenya and in response to demand from its members, articulated during consultation meetings held in August 2010, KENFAP identified the following as the priority thematic areas to be supported by research under ESFIM:

I. **An assessment of interventions by the Government of Kenya in maize input and output markets in the country.** The Government adopted agricultural development programmes, including NAAIAP, with the goal of increasing maize production in order to reduce food insecurity and rural poverty, as an effort to address the challenges posed by the post-election crisis in 2007. The Government programmes acknowledged that maize, the main staple food crop in Kenya, is produced predominantly by smallholder farmers and is the main source of livelihood in rural areas. The Government programme aimed at increasing maize productivity by improving access to low-cost fertiliser and other inputs. It also aimed at ensuring higher output prices to adequately reward investments by farmers. However, among farmers, there were major concerns about the certainty of government interventions. The aim of the study by KENFAP was therefore to determine the impact and sustainability of the interventions, involving delivery of subsidised fertiliser and certified seeds to smallholder farmers, and to outline relevant policy recommendations. It was expected that outputs from the study would allow for evidence-based reporting of the views of smallholder farmers on required policy reforms.

II. **Improving produce marketing by smallholder farmers through developing Warehouse Receipt Systems (WRS), which are accessible to smallholder farmers:** The demand by members of KENFAP for an accessible WRS stems from difficulties they encounter in marketing grains, especially when there is a seasonal glut. Most smallholder farmers have no storage facilities and face significant cash constraints, which drive them to sell their produce at low prices. It was anticipated that the WRS would help address some of these constraints while also improving transparency and access to inventory credit, thereby enabling smallholder farmers to better manage the marketing of their produce. The Government of Kenya initiated a process to develop a WRS in response to these needs. Part of the process involved setting up a Task Force allowing for stakeholder participation in the design and implementation of the WRS. The responsibilities of the Task Force included advising on the appropriate legal and regulatory framework as well as the policy environment needed to support a viable WRS. While KENFAP members supported the proposed WRS, it was necessary for KENFAP, as a member of the Task Force, to produce a position paper articulating the interests of smallholder farmers, in order to influence the design of the WRS. The main purpose of the ESFIM-funded study was to produce the required evidence-based knowledge for this position paper.

III. **Improving access by smallholder farmers to financial and insurance services and secure output markets:** Access to finance is cited by most smallholder farmers as the most binding constraint in efforts to adopt technology that increases farm productivity and output. However, most banks are reluctant to provide financial services to smallholder farmers due their low income, lack of information and high risks associated with farming. Moreover, financial services and products are not packaged in a manner that suits the needs of smallholder farmers and their typical household cash flow. In order to engage with Government and financial intermediaries in efforts to develop and promote innovative financial products that meet the needs of smallholder farmers, KENFAP prioritised the need for a study to identify specific impediments hindering smallholder farmers’ access to financial and insurance products. The study will include reviewing existing programmes aimed at extending financial services to smallholder farmers and suggest ways of improving them.
In carrying out the study of maize input and output markets, the research adopted a low-cost and high-quality data gathering approach using practical cases. It was aligned to the KENFAP lobby agenda and market strategies geared to enhancing smallholder farmers’ participation in markets as well as influencing the development of input and products markets in the country. The approach adopted by KENFAP was partly based on the ‘Participatory Research for Policy Formulation’ (PIPGA) under work area No.12 in the Farmers Fighting Poverty (FFP) programme developed by AgriCord. The study to underpin advocacy on the development of the warehouse receipt system (WRS) involved a cross-sectional survey to collect both qualitative and quantitative data from target stakeholders. The study adopted the Value Chain Analysis (VCA) framework to identify points where different types of interventions to promote inventory finance and structured commodity trade are feasible. The KENFAP field staff engaged focus groups (mainly drawn from the district-level structures of KENFAP) in discussions on the subject. Following these discussions, the study teams administered questionnaires to smallholder farmers and the other key respondents. The data collected was analysed by KENFAP staff at the head office. A similar approach was adopted in carrying out the study on financial services.

**Case study 1:**
**Government interventions in maize input and output markets in Kenya**

The study revealed that very few of the target smallholder farmers benefited from the programme, largely because of the scale of Government investment in the programme. Its coverage was also limited only to maize producers. Stakeholders were of the opinion that it was important that the programme be extended to cover other crops and even livestock farmers.

Evidence generated from the study showed that farmers who benefited recorded over 40 per cent increase in yield and output. This was attributed mainly to the application of inputs, which could normally not be accessed by farmers, mainly because they lacked the means to buy them. Furthermore, their overall cost of production was significantly reduced. This is not surprising, considering that the inputs were heavily subsidised. Despite the increase in yield and output of maize, the beneficiaries did not report a significant increase in household income. This was mainly because persisting inefficiencies in the maize marketing system meant that most of them sold their surplus crop at rather low prices during the harvest season, thereby reducing (virtually nullifying) the economic gains that the target households could have obtained. This finding demonstrated the importance of improving grain marketing systems if technology-driven gains are to benefit smallholder farmers and be sustained.

The study noted that the delivery of subsidised inputs to target farmers has the unintended consequence of undermining the development of private input-distribution systems in the country. Concerns were also raised about the sustainability of the input-distribution programme, particularly as the cost to Government was quite high. It was noted that if the Government’s inputs distribution programme could not be sustained and also undermined the private sector distribution system, then access to inputs by farmers could become an even more acute challenge.

**Case study 2:**
**Promoting accessible WRS in Kenya – farmers’ views on strategic options**

WRS pilots in Kenya were central to the review undertaken during the study. These pilots include the WRS being implemented by the Eastern Africa Grain Council (EAGC), which certifies participating warehouse operators. Other pilots involve community-based cereal banking schemes under which neither warehouses nor operators are certified. These are run by development agencies and NGOs such as SACRED Africa in Western Kenya, Farm Concern International in Eastern Kenya, Millennium Villages in Nyanza and USAID in lower Eastern Kenya. Though no legal and regulatory framework exists for the
WRS, it emerged that the EAGC had adopted rather stringent certification criteria. The EAGC certification process is also very elaborate and expensive (USD 4,400 per warehouse), making it very difficult for rural warehouses to be certified. Standard requirements include weighbridges and scales which have to be assessed on regular basis by the Kenya Bureau of Standards (KEBS). No such certification process exists under the Cereal Banking System – making banks nervous about the security of their interests when they lend against stocks stored under that system. Even the more elaborate WRS system managed by the EAGC has had limited success in attracting financing from mainstream banks, mainly because of concerns about lack of a legal and regulatory framework. Currently, the main bank lending against EAGC warehouse receipts is Equity Bank.

There is evidence that if the system is well-run it can be financially beneficial to farmers. The total carrying cost (i.e., cost of storage and cost of financing) over a period of six months is estimated at about 18 to 21 per cent of the cost per 90 kg bag during the harvest season, the average increase in producer price over the same period being about 66.7 per cent. However, very few smallholder farmers’ groups (representing only 10 per cent of users) have been able to access the WRS. The main beneficiaries (90 per cent) of the WRS pilot initiatives in Kenya were large scale farmers. Though the study found interest in WRS growing among the respondents, it was also apparent that access by smallholders was being limited by the following factors:

I. Lack of awareness of the system and its potential benefits.

II. Difficulty in complying with stipulated quality requirements. It was reported that a majority of the respondents (about 85 per cent of the farmers interviewed) could not meet quality standards, especially moisture tests stipulated for grains to be deposited under the WRS. The quality standards are set not only for purposes of minimising the risk of quality deterioration during storage but also to ensure ease of sale of the stored commodities as the standards have to reflect those applicable in the formal grain trade.

III. Furthermore, most could not deposit the minimum required quantity of 10 metric tonnes for which a warehouse receipt can be issued. With average smallholder farm sizes being small, it is difficult for individuals to produce the volumes that meet the minimum stated above.

IV. Lack of well-organised farmers’ groups to facilitate aggregation and collective marketing. Such groups also require access to collection centres where bulking and first-line quality certification can take place. The collection centres need to have basic equipment such as moisture metres and well-calibrated scales to minimise cheating on quality and volumes deposited by individual smallholder farmers.

In addition to these, the study also found that the existence of parallel WRS pilots with different requirements sometimes creates confusion and suggested harmonisation of standards, including promulgating a legal and regulatory framework that will engender trust in the system. It was noted, however, that this could lead to the emergence of a system that will continue to favour larger-scale depositors. To address this problem, the study recommended investment in the development of collection centres that are accessible to smallholders. It was suggested that it will be worthwhile to further assess the potential of using the small-capacity storage facilities under the cereal banking schemes as collection centres for the larger WRS which is being proposed. Furthermore, it recommended promotion of collective marketing groups among smallholders and building their capacity to enforce quality standards in bulking produce from members. To minimise uncertainty in market prices, the study recommended reviewing Government interventions in the grain market, including clarifying the role of the parastatal NCPB in the grain market.
Case study 3: Improving smallholder farmers’ access to finance in Kenya – a review

The study revealed that, in an attempt to broaden access to micro and small enterprises, including smallholder farmers, some financial institutions and insurance companies have set up specialised agricultural business (Agribusiness) departments and units. Some of these financial institutions have been developing innovative products targeting the agricultural sector. For instance, the Agricultural Finance Corporation (AFC) has several products including: Horticulture and Floriculture Loans, Seasonal Crops Loans, Machinery and Equipment Loans, Agribusiness Loans as well as Loan packages for livestock, water development, cash crops and oil crops. They have also developed the Stawisha Group Loans targeting smallholder groups. Other examples include the Cooperative Bank of Kenya, Equity Bank and Kenya Commercial Bank (KCB) which are marketing specialized agricultural finance products. In addition, Microfinance institutions (MFIs) and insurance companies have increased the number of financial products available to players in the farm sector, including those which are accessible to smallholder farmers.

However, it was observed during the study that very few smallholder farmers know about these financial and insurance products, thereby limiting uptake and utilization. The cost of borrowing also tends to be high. Though interest rates range from 10-18 per cent, there are additional costs such as upfront payment of loan processing fees as well as the cost of conveyance and insurance when required. These additional charges often increase the cost of borrowing to 21-24 per cent. The additional factor limiting uptake of some of these products is a requirement by some financial institutions for borrowers to make cash deposits which are used to secure the loans.

Based on the foregoing, the study recommended further research by banks, farmer organisations, donors and the Government to develop more accessible financial products for smallholder farmers. The study further recommended the adoption of more effective mechanisms to promote awareness of farmers about available financial products and services. It was noted that the Alliance for Green Revolution in Africa (AGRA) intends to undertake a more in-depth study of these issues in the financial sector. For that reason, it was proposed that KENFAP will collaborate with AGRA in undertaking that research and in disseminating its outcome, especially if it will further enhance access to agricultural finance with particular attention being paid to the needs of smallholder farmers.
Advocacy outcomes

The results of the studies were validated during a stakeholders’ workshops. The first one was about the interventions in the grain markets, held on 15 March 2011 in Nairobi (Box 5). On the whole, the reports raised significant doubts about the sustainability of the Government programme. The workshop participants endorsed the conclusions of the reports and resolved that the observations and conclusions should be brought to the attention of the Government of Kenya. They further resolved that Government should address the identified weaknesses in the existing programme before expanding to cover other crop sub-sectors.

BOX 5 Participating institutions at the KENFAP Validation Workshop on Kenya Government Interventions in Grain Input and Output Markets held on 15 March 2011 in Nairobi, Kenya

Participants included members of KENFAP, other farmer organisations such as the Cooperative Alliance of Kenya (CAK) and the Eastern Africa Farmers Federation (EAFF) as well as representatives of private sector organisations such as the Eastern Africa Grain Council (EAGC), the MEA Fertilizer Company, Kenya Seed Company, and the Seed Traders Association of Kenya (STAK). Other participants were from policy organisations including the Kenya Institute of Public Policy Research and Analysis (KIPRA), Tegemeo Institute of Agricultural Policy and Development (Tegemeo) of Egerton University, Kenya Agricultural Research Institute (KARI) and the Ministries of Agriculture and Finance, the National Cereals and Produce Board (NCPB), National Agricultural Accelerated Input Access Programme (NAAIAP) and the Agricultural Sector Coordinating Unit (ASCU). NRI was represented at the Workshop by Dr. Gideon Onumah. In addition, the KENFAP National Chairman held a one-to-one meeting with the Minister of Agriculture on the issues.

The report formed the basis of a presentation by a representative of KENFAP – Ms. Daphne Gatwiri Muchai – at a side-event on ESFIM at the third European Forum on Rural Development held in Palencia, Spain, between 29 March and 1 April 2011. KENFAP also presented a formal resolution, which in part reflected the conclusions and recommendations contained in the report, to the President of the Republic of Kenya in June 2011. The main platforms through which KENFAP is pursuing further policy advocacy action related to the issues raised in the report are the Kenya Private Sector Alliance (KEPSA) as well as the Prime Minister’s Quarterly Round Table and the biannual Presidential Forum. In response to the resolution, the Ministry for Livestock Development met with KENFAP representatives to discuss issues pertaining to drought response and management in arid and semi-arid lands in Kenya. The Ministry of Agriculture has also scheduled a meeting with KENFAP to discuss issues related to programmes affecting grain marketing as well as input supply to resource-poor farmers.

The second validation workshop was organised in early November 2011 to discuss the two other studies. These studies resulted in insights on experiences and limitations of current WRS and financial services in Kenya and valuable recommendations for a more conducive policy environment as well as recommendations to further develop these services and the necessary capacity of the national farmer organisation to engage. Outputs from this work feed directly into the Government-supported process to develop an accessible and regulated WRS in Kenya. KENFAP takes part in the on-going consultation process with the government and the studies provide the necessary evidence to support their contribu-
tions. In July 2012, KENFAP hosted representatives of the National Smallholder Farmers Association of Malawi (NASFAM) and the Farmers’ Union of Malawi (FUM) for a study tour on Warehouse Receipt Systems. From the perspective of KENFAP, the tour provided an opportunity to learn more about other parties providing MIS in the country and the need to collaborate with them in order to enrich the quality of information delivered to farmers.

Lessons learnt

- The use of KENFAP’s internal system of data-collection made it possible to get quantitative evidence on the impact of the input voucher scheme in a cost-effective manner. The presence of such a data-collection system within farmer organisations is an asset that empowers farmer organisations to influence policy with evidence-based advocacy.

- The external credibility of the impact study could have been enhanced if external researchers had conducted or supervised the research design. The impact evaluation cannot be considered as an external evaluation, as KENFAP had been involved as one of the suppliers of inputs in exchange for the vouchers, through its commercial branch KENFAP Service Ltd.

- The activities of AGRINATURA-NRI to provide access to experiences in other countries on WRS and MIS were well received by KENFAP. Also the gathering of stakeholders from governmental or regional entities to the workshop on WRS was facilitated by the networks and long-standing activities that AGRINATURA-NRI had in East Africa.

- KENFAP played a key role in establishing the East-African Farmers Federation (EAFF) that used the experiences on ESFIM research in their regional meetings on farmer advocacy, and to link ESFIM to the knowledge platform developed with IFAD-EU funding in the Support to farmer organisations in Africa Programme (SFOAP). EAFF and KENFAP facilitated access to three important international workshops where experiences on ESFIM collaborative research could be presented and discussed: the CTA Value Chain Conference on 6-9 November in Addis Ababa; the Second Global Conference on Agricultural Research on 18 October – 1 November 2012 in Punta del Este, and the Farmers’ Forum on 18-21 February 2012 in Rome.

Acknowledgements

The author is grateful to staff of the Kenya National Federation of Agricultural Producers (KENFAP) and in particular to John Mutunga, CEO, for support and advice throughout the ESFIM programme including his commitment and support to the wider outreach of the ESFIM programme to the global community. Other KENFAP staff who played key roles in the project include the following: Edward Kateiya (Head, Membership Services), George Odhiambo (Head, Lobby and Advocacy), Judith Libaisi (Deputy Head, Lobby and Advocacy), Daphne Muchai (Deputy Head, Membership Services) and Paul Gamba (Technical Policy Advisor).