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Farmer-driven research to improve food and
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Lessons and Successes in Farmer-Led
Agricultural Research.

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National Smallholder Farmers' Association of Malawi

FARMER-DRIVEN RESEARCH TO IMPROVE FOOD AND NUTRITION SECURITY

Lessons and Successes in Farmer-Led Agricultural Research

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Preamble

- The National Smallholder Farmers' Association of Malawi (NASFAM) is one of the leading farmer organisations in Malawi.
- Our vision is to be the leading smallholder owned business and development organisation in Malawi that promotes farming as a business, producing economic and social benefits for its members, their communities and the country.
- NASFAM realises that success of farming business depends on a number of factors including access to quality certified seed, access to scientific agricultural technologies, good agricultural practices, availability of markets.
- NASFAM therefore invests in farmer centred services in the entire value chain and is a leading advocate for joint farmer-led research where the farmers are working along with the researchers, and extension practitioners.



Farmer-Led Research

- NASFAM believes that smallholder farmers have the ability to participate in agriculture research.
- Over the years they have been in farming, farmers have been experimenting and testing ideas by themselves without necessarily knowing that what they are doing is research.
- There is a lot of local knowledge and technologies that farmers have produced, exploring new opportunities by experimenting with unique combinations of indigenous knowledge and new ideas from a variety of sources.
- NASFAM engages in participatory approaches where farmers partner with development agents, CGIAR Centres and Government recognised researchers.



Examples of Farmer-led research related projects

- Malawi's agricultural systems have been over-dependent on tobacco and maize for cash and food respectively.
- Due to many challenges posed by this, NASFAM has, over the past few years, been spearheading a crop diversification agenda.
- One of the major challenges to this agenda has been access to quality certified seed as well as development of varieties that are suitable in the present changing climatic conditions.
- To address these challenges, the NASFAM-ICRISAT partnership was first established in 2000 with funding from USAID, the objectives of which were twofold;
 - To promote groundnut and other grain legumes production in the smallholder sector.
 - To provide capacity for NASFAM to access better markets on the domestic, regional and international level.



Examples of Farmer-led research related projects

The groundnut Aflatoxin problem in sub-Saharan Africa

1. Cultivars and farming practices
2. Weather conditions
3. Drought stress during pod maturity
4. Time of harvest / pod removal
5. Method of harvest / drying
6. Rains at harvest and delayed drying
7. Mechanical / insect damage
8. Storage conditions
9. Conditions of packing and distribution
10. Inadequate monitoring and enforcement of food safety standards



Examples of Farmer-led research related projects

- In a quest to ensure that smallholder farmers have access to good quality seed at affordable prices, NASFAM has developed smallholder seed multiplication models which are built on a sustainable mechanism - injection of both foundation and certified seed in the first year of programme.
- In an effort to increase farmers' returns through external markets, NASFAM worked in collaboration with other Development Partners and ICRISAT to introduce high yielding varieties.
- ICRISAT builds sustainable levels of foundation seed which smallholder farmers multiply.



Examples of Famer-led research related projects

Building Effective Partnerships

- NASFAM negotiated Fairtrade and non-Fairtrade contracts to EU and South Africa
- Communities receive premium for quality nuts
- Made possible by:
 - ICRISAT support to monitoring production from planting to export
 - Low cost screening tools for Aflatoxin detection to ensure safety of product
- NASFAM success
 - Presents example of the catalytic role standards can play in promoting supply-chain development
 - Synergies between public and private sector actors
 - Incentives for quality production.



Examples of Farmer-led research related projects

Soil Health Project

- The project aims at increasing benefits of smallholder farmers from improved soil fertility through integration of Pigeon peas, Groundnuts and Conservation Agriculture in maize production systems in Malawi (NASFAM is working in partnership with ICRISAT and Chitedze Research Station)

Rural Livelihoods Economic Enhancement Project (RLEEP)

- This project aims at increasing incomes of smallholder farmer families through enhancing their participation in the groundnut value chain.

Conservation Agriculture Project

- The overall objective of the project is to promote selected principles and practices of Conservation Agriculture among smallholder farmers in order to achieve sustainable agricultural production, thereby achieving sustainable food and cash crop production, while reversing environmental degradation.



Lessons

- Engaging smallholder farmers in research strengthens the linkages between the researchers, extension and farmers. NASFAM has, over several years now, enjoyed good relations with the institutions.
- Farmer-led research empowers farmers not only to be beneficiaries of agriculture research but also to be active participants in the entire research process.
- Partnerships are critical relationships between farmers and researchers to develop appropriate technologies and need to be maintained.
- Farmer participatory research is crucial as farmers will be surer and more confident of applying and adapting to any new technologies once they have participated in its development.



Successes

- Increased access to certified seed since the farmers are directly involved in some seed research projects;
- Being an established farmer organisation, there has been an increased demand from research institutions such as ICRISAT to partner with NASFAM in their research projects because they are assured of getting the results.
- Increased adoption of technologies by farmers because they are involved in the research process and the research reflects their needs or suit their conditions.
- NASFAM has, for three years running, provided legume seed to the Malawi Governments' Farm Input Subsidy Programme (FISP).
 - Over 700 tonnes of seed were provided to the programme in 2011 and this was enough to benefit over 300,000 farmers;
- Increased yields by farmers since they use quality seed and scientifically tested technologies;
- Seed production training to smallholder farmers to produce certified legume seeds;
- Built capacity to meet quality standards and specifications through training in Quality Management Systems from the field to storage and processing;
- Linkages and capacity building to meet demanding Fairtrade standards for European markets

Challenges

- Poor documentation of farmer-led research initiatives in Malawi, though a lot of initiatives are happening;
- Poor documentation of farmer generated knowledge;
- Small land holding sizes which are mostly fragmented and these limit farmers to invest in improved varieties tested and realised by researchers;
- Process of releasing varieties is slow and bureaucratic in Malawi, though the process is under review to amend the technology release procedures;
- Generally public investment in agriculture research and development is inadequate as resources are concentrated in other areas.





“The future belongs to the organized”

**Thank You
Zikomo!**

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