PROMISING RESILIENCE PRACTICES

PEACE, PROSPERITY AND REGIONAL INTEGRATION

Credit: Farm Africa

Mitigating Drought Impact through Drought Tolerant Crop Varieties and Establishing Hybrid Maize Multiplication Mechanism

Introduction

Farm households that live in arid and semi-arid kebeles of West Abaya, Bonke and Arbaminch Zuria woredas have frequently been affected by recurrent drought which has resulted in declining livelihood bases.

The recurrent drought coupled with prevalence of the notoriously dangerous fruit fly which significantly undermined mango production drastically deteriorated most agriculture-based livelihood of farm households in these woredas. Drought has adversely affected major food crop production which left many farm households dependent on emergency food aid.

Vita, an Ireland based international NGO in collaboration with partner institutions, implemented a project titled "Improving Smallholder Livelihoods and Resilience through Climate Smart Agricultural Economic Development." It aimed at addressing the root causes of the problem by introducing interventions that help create access to drought tolerant crop types and varieties (mung bean and haricot bean varieties). The intervention also introduced farmers to managed hybrid maize basic seed production.

INTERVENTION AREA
Enhanced production and livelihood diversification

LOCATION
27 kebeles in West Abaya, Bonke and Arbaminch Zuria woredas of SNNP regional state

STAKEHOLDERS AND PARTNERS
Vita, SoS sahel, Farm Africa, Self Help Africa GamoGofa Fruit and Vegetable Marketing Cooperative Union and Omo Micro Finance Institute and targeted beneficiaries

Methodological Approach

- Participatory problem analysis, which helped identify drought as key problems that affected livelihood;
- Target groups identification, which involved use of carefully selected criteria for identifying farm households that have lands that are adjacent;
- Establishment of project implementation teams at zonal and woreda level which regularly meet and discuss;
- Medium size stores constructed for the seed producer's cooperatives as it is a standard requirement to be registered as a formal seed source.

Results

- As targeted farmers were able to successfully produce hybrid maize, and other drought tolerant food crops such as haricot bean and mung bean, farmers have obtained increased access to seed of hybrid maize variety;
- So far, the targeted farmers have produced and supplied more than 3,000 quintals of hybrid maize seed. SNNP regional seed enterprise is buying seed from these seed producing famers;
- Certified seed sources for mung bean are limited even in the country and this year the primary cooperative producing C1 seed over 40 ha of land and is expected to produce 440 quintals of certified mung bean seed;
- Income increased, asset built up as a result resilience capacity of drought affected arm households improved;
- Maize productivity increased;
- More than 1,852 farmers adopted drought resistant and fast-growing crops, intercropping legume crops and 231 ha of land covered with selected Climate Smart Agricultural practices. Their income sources and agricultural production diversified and as a result 90% of the 1,852 target beneficiaries' income increased by an average of 4800 birr;
- 90% of the beneficiaries consume protein rich mung bean, which they produced on average three times a week and that has potentially improved the nutritional status of the household members;
- Sustainable market linkage has been created for 280 target beneficiaries of the project, become economically resilient due to high economic return of the seed they produced as compared to local grain.

Validation

Field days and experience sharing visits were organised to evaluate how the practice has helped beneficiaries address their problems. Federal and regional government institutions, policy makers and other development partners attended the field day and proved that the practice has helped the beneficiaries significantly in terms of improving their income.

Success Factors

- Establishment of project implementation teams at woreda and zone level contributed to successful execution of the project.
- Practical technical training on hybrid maize seed production and strong technical backstopping by experts were deployed at project site.
- Influence of middlemen and brokers on the cooperatives was controlled through a public-private partnership platform that identifies and takes measures against middlemen that manipulate farmers to their advantage.

Constraints

- Due to poor road infrastructure, transportation is a major constraint that affected marketing of farm produces and procurement of inputs by targeted farm households.
- Social unrest affected progress in project implementation.

Lessons Learned

- Collaboration with partners operating at woreda level and beyond is key for successful implementation of the good practice;
- Beneficiary selection should be carefully done with the involvement of local stakeholders and community leaders;
- Short duration crops such as mung bean and haricot bean are strategic food security crops in drought prone areas.

Sustainability

There are some key elements that ensure sustainability of impact: Market access; Technical capacity building of farmers/ agro-pastoralists; Strong linkages among the relevant institutions.

Replicability and Up-scaling

Make sure the practice addresses the priority problem of the targeted community. This is based on the understanding that practice is context specific, what is actually a priority problem in one area might not be priority in another.

Ensure sustainable input supply and readily available market access or plan for market linkage from the onset. Wider consultation with and involvement of community members from the problem identification and priority setting stages through all stages of the project implementation process.

Additional Information

http://www.musika.org.zm/article/64-building-smallholder-resilience-through-climate-smart-agriculture

http://journals.sagepub.com/doi/pdf/10.1177/0971852416640639

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