



World Vision

**PAPER PRESENTATION TO THE 5TH SYMPOSIUM ECHO
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**Title: Evidence-based Food Security Improvement; A case
of joint RIPAT project between World Vision Tanzania
(WVT) and RECODA in Babati district – Tanzania**

Presentation Outline

- Introduction
- Objectives
- Methodology
- Results and Discussions
- Conclusions and
- Recommendations

Introduction

- The study area of Babati was chosen because of the on-going joint project between WVT and RECODA - THRIVE (Transforming Household Resilience in Vulnerable Environment) project dealing with food and nutrition security.
- WVT is a Christian development, relief, and advocacy organization dedicated to working with children, families, and communities to overcome poverty and injustice.
- RECODA is a research and development organization dealing with bridging agricultural technology gap by facilitating community based projects geared toward poverty alleviation, food security and environmental conservation.
- Evidence of food and/or nutrition security is assessed based on the application of RIPAT Approach and definitions provided by World Food Programme (WFP)/FAO and Tanzania Agricultural Sector Development Programme (ASDP)-II.

Introduction cont – Important definitions.

- RIPAT is an extension approach which aims at closing agricultural technologies as a means of improving livelihoods and self-support among rural small scale farmers.
- WFP (2006) define food security as “all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life.”
- ASDP II (URT, 2017) define as all people at all times have physical and economic access to adequate amounts of nutritious, safe, and culturally appropriate foods, which are produced in an environmentally sustainable and socially just manner, and that people are able to make informed decisions about their food choices.

Intro cont.

- WFP and ASDP II explain three pillars of food security
 - i. Food availability** - sufficient quantities of food are available to people on a consistent basis.
 - ii. Food access** - people have sufficient resources to obtain appropriate foods for a nutritious diet.
 - iii. Food utilization:** people have sufficient knowledge of nutrition and child care practices.
- Other studies summarise food security in four parameters i.e. i) availability, ii) accessibility iii) quantity and iv) quality
- ASDP II emphasis on the Integrated Food Security and Nutrition Assessment System (IFSNAS), in Kiswahili is “Mfumo wa Uchambuzi wa Uhakika wa Chakula na Lishe” (MUCHALI) which was designed as among the strategies to reach the means (Food and Nutrition Security - FNS).

Study justification and objectives

Justification

- Vesterager *et al.* (2015) considering about the component of food security and nutrition they observed that it is difficult to find documented evidence showing that linkage – partly because of poor quality evaluations, but also because most of the agricultural project are not designed with a nutritional lens and take into account what type of agricultural components that can lead to improved nutrition.

Study objectives

- To document the evidence of agricultural projects contribution in the improvement of food and nutritional security.
- To establish importance of extension approach and definitions in the improvement of food and nutrition security.

Methodology

- The study was conducted in Babati District where THRIVE project was implemented
- The study population were all households that benefited from THRIVE projects and neighboring communities.

Research design

- The study used a cross-sectional research design whereby the subjects were studied at one point in time.
- Random sampling technique was employed to select group members and communities who were interviewed at the household level.

Sampling Procedures and sample size

- Six villages were selected from four wards
- The total 132 households were interviewed
- Focus Group Discussion (FGDs) discussions were conducted and key informants (KIIs) were also interviewed

Data analysis

- SPSS was used to analyse quantitative data while content analysis was used for qualitative data collected through KIIs and FGDs.

Results and discussions

- Study findings show that about three quarters (93%) of the respondents were heads of household.
- Average household size was 4.9; which is slightly above the national average of 4.8 individuals per household (URT, 2013).
- 81% of all households visited had children below the age of 18, which signifies they support of households is as equally as supporting children welfares.
- All households (100%) are kept own a piece of land for mixed farming.
- The household land holding size is at the average of 3.6 acres which is within the range of small scale farmers which according to Anderson *et al.* (2016) the average smallholder land holding size in Tanzania is 3 - 7 acres.

Results and discussions (Cont'd)

Community Mobilization and Capacity Building

- The project applied the RIPAT Approach in two phases; i.e. RIPAT 'Start' with 12 villages and 19 groups, and through RIPAT 'spreading' capacity building of community-based experts (LFs and EOs) were achieved who facilitated up-scaling of interventions to new 24 villages and 46 groups.
- Diffusion of project intervention to communities where about 1,378 individuals have adopted the production of improved banana varieties.
- Local institutions i.e. Farmer groups, EOs and village government supported community mobilization, advocacy and lobbying, spreading of the interventions and ensure its sustainability.
- Lead Farmers (LFs) and Extension Officers (EOs) were directly responsible with the up-scaling of the interventions

Results and discussions (Cont'd)

Advocacy , Lobbying and Local value chain development

- Project beneficiaries have been selecting their leaders democratically using their constitutions and are aware of the group's bylaws and those of their villages.
- Project members have been able to advocate for the establishment of banana marketing centres and are on the way to form banana market association which will be an important platform for advocacy.
- At least three Banana collection centres have been established.
- Local value chain development – proper utilization and linked with various stakeholder and service providers (agro-dealers, buyers, extension services, private companies, processors etc) in the value chains of various crop (OFSP, Banana, pigeon peas)

Results and discussions (Cont'd) - Adoption

- Strong producer (farmer) groups, Village Savings and Loan Association (VSLA), teachings and hands-on skills which were introduced through the Farmers Field School (FFS)/group plots and individuals enabled the targeted project beneficiaries to stay together and adopt the introduced technologies.

Table 1: Summary of the adoption rates from the basket of options.

Rank	Options	Number of Farmers	Percentage - %
1	Improved banana	112	84.5
2	OFSP	91	68.9
3	VSLA	95	71.9
4	Maize intercropped with pigeon peas	132	100
5	Improved chicken	84	63.4

Results and discussion (about adoption)

- Adoption of improved banana varieties has significant effects to the existing agro-ecological/farming systems in the study as: -
 - it addresses the low productivity/returns per unit area, limitations of crop diversification,
 - introduction of perennial crop which enhance employment of farmers all year round, utilization of locally available resources and environmental degradation.
- Adoption of high value and nutritional crops such as OFSP has been instrumental in food and nutrition security.
- Improvement of local chicken have provided improved income and nutrition through eating eggs or selling and buying other food stuff.
- VSLA has enhanced the availability of capital for investing in the introduced agricultural interventions and buying food staff in case of shortage of food.

Environmental Conservation/Agro-ecological Intensification

- Areas with the potential of traditional irrigation systems have been revived and farmers are watering their banana and other crops.
- Rainwater harvesting is employed in areas with limited irrigation potentials.
- Farmyard manure is used properly
- Communities are aware of the locally available resources and have gained capacity to exploit them accordingly knowing that: -
 - Population is increasing but the land remain the same
 - Food security is about four parameters
 - i. availability
 - ii. accessibility
 - iii. quantity and
 - iv. quality
 - Agro-ecology intensification / biodiversity

Project achievement and sustainability in FNS

- Increased levels of food security and nutrition due to increased yields under crop diversification, integration and intensification - hence food availability and access at the required quantity and quality
- Increased income through selling surplus i.e. increase food access.
- Sustained adoption of most of the agricultural technologies – FNS
- Diffusion of the most popular technologies - FNS to more community
- Improved employment of small scale farmers year round
- Strong farmer groups / association for lobbying and advocacy
- Involvement of local government and lead farmers
- Development of crop based local value chains
- It was learned that perennial crops (banana) and VSLA are among the interventions which farmers preferred the most so they have acted as a glue to keep the group members together.
- Increased biodiversity
- Use of RIPAT approach

Challenges

- Communities members are reluctant to join new agricultural projects because of the culture (not outgoing) and/or have negative connotation of the past projects which failed to deliver the expected results.
- Digging banana holes and manure applications were found to be labor intensive which made some group members to drop out.
- Group formation was not an easy task
- Mindset of doing business as usual; that it was difficult to introduce new crops (banana and OFSP) and new management practices i.e. contours, rainwater harvesting and selling banana at the collection centers.
- Hazards of climate change - distortion of the cropping calendar due to the change of rainfall patterns and distributions.
- Few extension officers with low motivation and/or facilities
- Agricultural processing and marketing was a problem where the crop like pigeon peas was affected by low price and establishment of collection centers for banana selling needs time to pick-up.

Conclusions

- Evidence of improved FSN in joint THRIVE project between WVT and RECODA has been achieved based on the four components defined under Food Security: -
 - Availability
 - Accessibility
 - Quantity
 - Quality
- THRIVE project has made significant achievement in FNS because of the way it was designed
- Agro-ecological farming was given due considerations through involvement of different actors (multi-disciplinary approach), crop diversification (perennial crops) and integration, improvement of traditional irrigations, rainwater harvesting and soil organic matter.

Recommendations

- More studies are required to better document the THRIVE project achievements .
- Agricultural projects should be designed with nutritional lens
- Biodiversity/agro-ecological farming should be integrated in the normal crop agronomic and animal improvement practices; and where possible the two should complement each other
- All actors in agricultural development should agree on the important definitions and as much as possible to adhere to the existing national policy and programmes.







Thank you for listening