GRANT COMPLETION REPORT

PUTTING LESSONS INTO PRACTICE:

SCALING UP PEOPLES' BIODIVERSITY MANAGEMENT FOR FOOD SECURITY

OXFAM NOVIB
I-R-1371-OXFAM

JUNE 2016

OXFAM

INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT-OXFAM NOVIB PROGRAMME:

"PUTTING LESSONS INTO PRATICE: SCALING UP PEOPLES' BIODIVERSITY MANAGEMENT FOR FOOD SECURITY"

(I-R-1371-OXFAM)

PARTNERS:

Asociación ANDES
ASOCIACIÓN PARA LA NATURALEZA Y EL DESARROLLO SOSTENIBLE

SEARICE

Community Technology Development Trust (CTDT)

IFAD
Investing in rural people

Cover page: FFS local technician in Lares explaining the nutrition value of community's purple colored potato variety
Photo credit cover page: Jiska van der Heide/Oxfam Novib

INDEX

ACRONYMS AND ABBREVIATIONS

ANDES	*Asociación para la Naturaleza y el Desarrollo Sostenible*
ARIPO	African Regional Intellectual Property Organization
ASEAN	Association of Southeast Asian Nations
BUCAP	Biodiversity Use and Conservation in Asia Programme
CAWR	Centre for Agro-ecology, Water and Resilience
CBD	Convention on Biological Diversity
CBDC	Community Biodiversity Development and Conservation
CGN	Centre for Genetic Resources, the Netherlands
CGRFA	FAO's Commission on Genetic Resources for Food and Agriculture
COP	Conference of Parties
CSO	Civil Society Organisation
CTDT	Community Technology Development Trust
DARD	Department of Agriculture and Rural Development
DARE	Democratizing Agricultural Research and Extension
FAO	Food and Agriculture Organisation
FCRI	Field Crop Research Institute
FFD	Farmer Field Days
FFS	Farmer Field School
FGD	Focus Group Discussion
GB	Governing Body
GPC	Global Programme Committee
IFAD	International Fund for Agricultural Development
INIA	National Institute of Agricultural Innovation
IP	Indigenous Peoples
IPCC	Intergovernmental Panel on Climate Change

IPM	Integrated Pest Management
IPR	Intellectual Property Rights
IPSHF	Indigenous Peoples and Smallholder Farmers
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
NGO	Non-governmental organisation
NPL	National Postcode Lottery
NUS	Neglected and Underutilised Species
PGR	Plant Genetic Resources
PGRFA	Plant Genetic Resources for Food and Agriculture
PPB	Participatory Plant Breeding
PPD	Plant Protection Department
PPSD	Plant Protection Sub-Department
PRA	Participatory Rural Appraisal
PVE	Participatory Varietal Enhancement
PVP	Plant Variety Protection
PVS	Participatory Varietal Selection
SADC	Southern African Development Community
SD=HS	Sowing Diversity = Harvesting Security
SEARICE	South East Asia Regional Initiatives for Community Empowerment
Sida	Swedish International Development Cooperation Agency
SA	SD=HS Scientific Adviser
SoWBFA	State of the World's Biodiversity for Food and Agriculture
SRD	Center for Sustainable Rural Development of the Can Tho University
SRI	System Rice Intensification
SWOT	Strengths, Weaknesses, Opportunities, and Threats

TK	Traditional Knowledge
TOA	SD=HS Technical and Operations Adviser
ToT	Training of Trainers
UNFCCC	UN Framework on Climate Change Convention
UPOV	International Union for the Protection of new varieties of Plants
WUR	Wageningen University and Research Centre
VCU	Value for Cultivation and Use
ZFU	Zimbabwe Farmers Union

EXECUTIVE SUMMARY

The IFAD-Oxfam Novib Programme "Putting Lessons into Practice: Scaling up Peoples' Biodiversity Management for Food Security" was implemented in 2012 to 2015. The goal of the *Programme* was to uphold, strengthen, and mainstream the rights and technical capacities of indigenous peoples and smallholder farmers, and to influence local to global policies and institutions on the sustainable use of plant genetic resources for food security, under conditions of climate change. This global Programme was implemented jointly by Oxfam Novib and three long-term country partners of Oxfam Novib's Global Programmes: the *Asociación para la Naturaleza y el Desarrollo Sostenible* (ANDES) in Peru, the Southeast Asia Regional Initiatives for Community Empowerment (SEARICE) in Vietnam; and the Community Technology Development Trust (CTDT) in Zimbabwe.

In June 2011, IFAD took part in the participatory design of the Programme. In 2012-2013, baseline surveys were conducted in the three Programme countries with the aim to understand and build on local peoples' perceptions, knowledge and needs, to identify and strengthen their coping strategies for climate change and scale this up. The baseline survey served as a participatory diagnosis and planning tool; building on the perspectives of the indigenous peoples and smallholder farmers. In 2012, the Programme inception was conducted in Vietnam to agree on the first year annual work plan and budget, the baseline survey global framework and ways of working. A Global Programme Committee (GPC) composed of a representative from each partner organization was set up. The GPC met regularly to ensure Programme coherence related to content and policy implementation. Aside from taking the global implementation lead, Oxfam Novib was responsible for the Programme's management and financial administration.

Mid-term review and end-term evaluations have been conducted to assess the progress, achievements and lessons at country and global levels and adjust the Programme's implementation accordingly. These included 1) The IFAD supervision mission meeting in Zimbabwe (12-18 November 2014), 2) The GPC–led mid-term evaluation (9-14 June 2014) in Zimbabwe, 3) The internal evaluation in Vietnam (3 to 9 September 2015), and 4) The IFAD-led external evaluation (8-17 December 2015).

The internal and external evaluations confirmed the Programme was successful in *scaling up and mainstreaming its innovations and the use of its tools, and most importantly empowering indigenous peoples and smallholder farmers.* The Programme delivered *successful results in all four pre-set major outcome areas,* evidenced by the following indicators: (1) 83,700 households reached in Peru, Vietnam and Zimbabwe (including 15,532 primary target households; or 82,400 inhabitants with at least 60% women); a total of 91 Farmer Field Schools (FFS) established with a total of 2,614 farmer participants; (2) Improvement in seed security, as illustrated by an increase in the accessibility of genetically diverse seeds; (3) Improvement in food security, with 30% increase in productivity, and better pest and disease resistance; (4) Local to global policy engagement, resulting in new local ordinances and global policy recommendations on Farmers' Rights. The Programme developed knowledge products, such as gender sensitive tools for scaling up (baseline and endline surveys; Plant Genetic Resources for Food and Agriculture/PGRFA Participatory toolkits; Farmer Field School/FFS curricula; women's video

diaries) and developed a set of six scaling up pathways[1] to further improve impact within and outside Programme areas. The Programme provided key insights into farmers' perceptions of climate change and how they adapted to it through the use of plant genetic resources for food and agriculture (PGRFA). The results of the Programme were submitted to the International Treaty on Plant Genetic Resources for Food and Agriculture (http://www.planttreaty.org/sites/default/files/gb6inf05e_Add1.pdf) and were submitted for inclusion in FAO's Report on the State of the World's Genetic Resources for Food and Agriculture.

As confirmed by the external evaluation conducted by Dr. Trygve Berg of the Norwegian Agricultural University *some of the significant outcomes* of the Programme include:

The Programme consists of a chain of interventions including work on crop improvement and agronomy, seed multiplication and distribution, and seed regulations and policy work. Isolated work on each of those components would arguably have had limited impact. The Programme has shown that successful work on all of this as a "package" has the potential of making significant and lasting change. In terms of *food security*, the Programme's FFS have been able to facilitate the development or adaptation of varieties that meet women's preferences and needs. The Programme's results confirmed that women's roles in crop management are closely linked to their responsibility for ensuring daily household food security and stockpiling food for periods of scarcity. Hence, the inclusion of women's preferences into the criteria of selection and/or breeding objectives plays an important role in strengthening women's roles in households food and nutrition security. Additionally, through access to good seeds and use of improved agronomic practices, participating farmers have increased crop yields significantly, reduced the use of inputs and to some extent made more income from their harvest by selling seeds rather than food grains and by growing high quality varieties that fetched better price in the market. The additional income is then used to buy food especially during period of scarcity or huger period, which is observed as one of households' coping strategies. The contribution of the Programme towards food security is best illustrated by the case of the indigenous peoples in North Vietnam where people experienced period of scarcity or hunger period, of up to 17 weeks. At the end of Programme's implementation, this period is reduced to 7 weeks and completely eliminated in some areas. The Programme is implemented in three different countries under very different agro-ecological and socio-political conditions. This requires flexibility and capacity to adapt content and approaches. This adaptation given, the Programme ideas function in all of these contexts.

The *alliance between local and international stakeholders* as exemplified in Peru is considered key in achieving the Programme's objectives. A collaborative work between the Quechua farmers, *Asociación* ANDES, the International Potato Center (CIP) and with support from the IFAD-Oxfam Novib Programme, Sida and the FAO's International Treaty on Plant Genetic Resources for Food and Agriculture, has allowed 750 potato seeds from the Potato Park to be deposited in Svalbard Global Seed Vault[2] in August 2015. Building on the work of the Programme, farmers from the Potato Park learned how to pollinate their potatoes and collect seeds for storage. Some of the seeds were also used

[1] The six scaling up pathways are: PGRFA Participatory Toolkit; Farmer Field School (FFS); PGRFA Access; Climate Change Response; Policy Influencing; Gender Inclusion

[2] A facility established 10 years ago in the permafrost far north of the Artic Circle, funded by the Global Crop Diversity Trust and the Government of Norway. The Seed Vault currently holds over 860,000 food crop seeds from all over the world, to preserve important food crops for future generations.

to develop new varieties to feed their communities. The deposit of seeds from the Potato Park in the global seed vault reflects the combination and complementarity of *in-situ* conservation in the field and *ex-situ* preservation in national and international genebanks, combining centuries-old tradition with cutting edge science, to conserve plant genetic heritage for future generations in case of any pests, diseases or impacts of climate change, which may lead to the loss of important food crops.[3] This is the first and only contribution of a non-state actor to Svalbard. The seed deposit assures valuable genetic potato diversity, which could be crucial for future global food production and to the benefit of humanity.

In *Vietnam*, the Programme has been able to go beyond the common notion that Participatory Plant Breeding (PPB) is an alternative only in marginal areas, where the seed industry is absent. The Programme in North Vietnam built on the success of the Programme partner's work in the Mekong Delta. The internal and external evaluations confirmed that four hundreds seed clubs in the Mekong Delta provided an impressive 30 percent of the total seed requirement in 2014 while only 17 percent was supplied by the private seed companies. This shows that not only FFS-PPB is effective in small-scale and marginal/low potential farming areas as exemplified by the case of North Vietnam; it also has merits and potentials in high-yield commercial farming. In *Zimbabwe*, the Programme has managed to create strong alliances with several members of parliament, academics from universities, government research stations and CGIAR[4] Centres (ICRISAT[5], CIMMYT[6] and CIAT[7]). The Programme also formalized a partnership with one of the largest providers of mobile communication services in Zimbabwe, Econet Wireless allowing more than 450 farmers to receive agricultural information and weather forecasts that are important for planning the farmers' agricultural activities. This is especially crucial since the majority of farmers in the target areas in Zimbabwe only have one rain-fed cropping cycle per year for all the major crops for the community's food and nutrition security. In addition, CTDT drafted a Farmers' Rights Law jointly with the Ministry of Agriculture. This suggests that the approach and advocacy work of the Programme in Zimbabwe in supporting farmers' seed systems is in the process of being adopted at national level by the government.

Lastly, the leadership of *Oxfam Novib* for the overall management of the Programme implementation, including the implementation of the global dimension of the Programme has been successful. The supervision mission of IFAD and internal/external evaluations confirmed that Oxfam Novib ensures the coherence of the Programme's methodology and tools through the development of a global survey framework, systematization of the Farmer Field School (FFS) curriculum, field guides and Training of Trainers as well as the conceptualization of the six scaling-up pathways of the Programme. The scale up pathways help ensure the spread of impact within and outside of the programme scope. This was submitted to the 6th Governing Body of the International Treaty for Plant Genetic Resources for Food

[3] Available at http://www.fao.org/news/story/en/item/326369/icode/

[4] Consultative Group for International Agricultural Research

[5] International Crops Research Institute for the Semi-Arid Tropics

[6] International Maize and Wheat Improvement Center

[7] The International Center for Tropical Agriculture

and Agriculture and was distributed as one of the official working documents of the meeting. As cited from the grants portfolio advisor of IFAD (2014), Oxfam Novib ably leverages on each partner's comparative advantage, and is sensitive to ensuring that the approach and activities are relevant and specific to the differing country context, while at the same time identifying common grounds to ensure that lessons learnt and results can be meaningfully aggregated and compared, so that "the whole is greater than the sum of its parts". Oxfam Novib also performs very well with regard to establishing global-level partnerships and knowledge management and sharing. Oxfam Novib has, together with the country Programme partners, translated farmers' situation into policies for active promotion at the global level. With Oxfam Novib's leadership, the Programme has reviewed the entire seed-related policy environment in the three countries, identified problems, and supported dialogues with relevant national authorities aimed at securing legal space for farmer-based seed multiplication and distribution. The Programme has been able to take these issues to the international level (the International Treaty on Plant Genetic Resources for Food and Agriculture and the Food and Agricultural Organization) by including them in debates on how to implement Farmers' Rights.

The internal evaluation also showed that, despite significant achievements, the programme capitalised on only a proportion of its knowledge products, due to the lack of more tailored *participatory knowledge management* that can build epistemic bridges between scientific and indigenous knowledge areas. For the next phase, the Programme will focus on a more effective knowledge management systems that will respond to the needs of its target groups and integrate local and indigenous, and formal and scientific fields of knowledge. The second phase of the programme will aim to capitalise on the products and lessons of phase one, and leverage its achievements. Participatory knowledge management which is also at the heart of IFAD's priority area of agricultural research for development, will contribute to the further scaling up and mainstreaming of the programme's impact.

The IFAD-Oxfam Novib Prorgamme was funded by IFAD, Oxfam Novib, Directorate-General for International Cooperation (DGIS) of the Ministry of Foreign Affairs of the Netherlands, and the European Commission-IFAD grant to Bioversity International. IFAD's investment to the Programme has been pivotal in enabling the Programme to further scale up its work with additional support of other donors such as the Swedish International Development Cooperation Agency (Sida), and the Netherlands National Post Code Lottery (NPL). To date the IFAD-Oxfam Novib Programme has grown into a Programme that has been implemented in five countries, targeting 150,000 households. This Programme is called: Sowing Diversity= Harvesting Security (SD=HS[8]). This shows that the investment of IFAD has far greater spread and impact.

This grant completion report aims to give *a summary* of the three year Programme's implementation in terms of *overall achievements* as compared to the objectives described in the logframe and it includes reflections on innovation and sustainability of the Programme and potential for further scaling up. The report will end with conclusions, lessons learned and learning notes; findings and recommendations of the internal and external evaluations will be reflected as well in the report.

The report is organized as follows: 1) Introduction; 2) Grant description and implementation arrangements; 3) Review of performance and achievements by components; 4) Assessment of effectiveness in achieving component objectives; 5) Assessment of impact and impact attribution; 5)

[8] SD=HS is a five-year (2013–2018) scaling up Programme, funded by the Swedish International Development Cooperation Agency (Sida) that builds on the IFAD-Oxfam Novib Programme, implemented by Oxfam Novib with seven global partners, in five countries. SD=HS aims to uphold, strengthen and maintain the rights and technical capacity of indigenous peoples and small-holder farmers, and to influence local to global policies and institutions on the access to and sustainable use of plant genetic resources for food and nutrition security under conditions of climate change

Programme costs and financing; 6) Assessment of grant management and partners' performance; 7) Innovation, replication and scaling up; 8) Sustainability; 9) Conclusions and lessons learned

1 INTRODUCTION

1. Indigenous peoples and smallholder farmers (IPSHF) are critical actors in the collective global responses to challenges posed on food security and nutrition in the context of climate change. IPSHF manage more than 80% of the world's estimated 500 million small farms, and provide more than 80% of the food consumed in a large part of the developing world, contributing significantly to food and nutrition security, and the reduction of poverty (FAO[9] 2014, IFAD[10] 2013). At the same time, they have to address increasing urbanization, globalization, demand for high-value products, pressures on natural resources, and climate change. The latter means they have to face more extreme weather; also that droughts, floods, and storms have a more immediate and stronger impact. The more gradual effects of climate change, such as water stress in crops, coastal erosion from rising sea levels and unpredictable pest infestations are felt too. All of this underlines how important it is for indigenous peoples and smallholder farmers to strengthen their capacity to adapt their farming and seed systems for their livelihood and food security.

2. IPSHF's knowledge of agro-ecosystems, their seed management and resilience to the vagaries of weather conditions are critical to building appropriate local to global responses. Despite the increasing acknowledgement of IPSHFs' roles and knowledge by international policy fora and increasing availability of studies on farmers' adaptation strategies[11], IPSHFs' participation in Programmes and policies related to climate change often remains limited to the margins of mainstream agricultural Programmes.

3. Despite a number of studies on farmers' perceptions of climate change[12], there are still discrepancies between IPSHFs' use of complex adaptation processes and farmers' limited adoption of technical options provided by agricultural research. Learning from decades of experiences in participatory research worldwide regarding the role of peoples' traditional knowledge, how do we apply this to the new realities of climate change? How can we enhance farmers' traditional knowledge for weather forecast and agricultural planning? How do we strengthen multi-stakeholder collaboration in support of IPSHFs' adaptation strategies?

4. The need for improved access and use has been clearly recognised by the international community in the revised Global Plan of Action for Plant Genetic Resources for Food and Agriculture (FAO 2011), the International Treaty on Plant Genetic Resources for Food and Agriculture and, more indirectly, in the Nagoya Protocol on Access and Benefit-sharing.

5. The IFAD-Oxfam Novib's "Putting Lessons into Practice: Scaling up people's biodiversity management for food security" (hereafter: the Programme) was designed and implemented to uphold, strengthen, and mainstream the rights and technical capacities of indigenous peoples and smallholder farmers, and to influence local to global policies and institutions on the sustainable use of plant genetic resources for food security, under conditions of climate change. The Programme was implemented in the period of 2012 to 2015 in *Peru, Vietnam, and Zimbabwe* and included *a global*

[9] Food and Agriculture Organization of the United Nations

[10] International Fund for Agricultural Development

[11] Below, T., et al. 2010

[12] Moyo et al. 2012

component that ensures IPSHF's Right to Food (RtF) and Farmers' Rights are realized through effective participation in national and international policy engagement as well as through the development of a global framework and exchanges and sharing of lessons amongst the three countries.

6. The strategic vision was set on helping indigenous people and small holder farmers, particularly women, to empower themselves to claim their Right to Food (RtF) and Farmers' Rights. The Programme's exit strategy was geared towards sustainability by scaling up people's capacity to organize, learn and act to continuously innovate and engage in corresponding policy reforms.

2 GRANT DESCRIPTION AND IMPLEMENTATION ARRANGEMENTS

2.1 GRANT GOAL, OBJECTIVES, COMPONENTS, AND TARGET GROUPS

7. The goal of the Programme was to uphold, strengthen, and mainstream the rights and technical capacities of indigenous peoples and smallholder farmers, and to influence local to global policies and institutions on the sustainable use of plant genetic resources for food security, under conditions of climate change.

8. The three specific objectives of the Programme are as follows:

I. Develop locally appropriate adaptation strategies for food security by bridging traditional knowledge and science on plant genetic resources and incorporating local perceptions on climate change;
II. Empower indigenous peoples and smallholder farmers to influence local, national, regional and international food, agriculture and climate change policies toward realising the right to food (RtF); and
III. Strengthen the adaptive capacities of smallholder farmer communities and indigenous peoples in plant genetic resources conservation, and access and sustainable use, by scaling up successful and/or innovative models.

9. The Programme was implemented by Oxfam Novib jointly with its partners in three countries: in Peru with the Asociación para la Naturaleza y el Desarrollo Sostenible (ANDES), in Vietnam with the Southeast Asia Regional Initiatives for Community Empowerment (SEARICE); and in Zimbabwe with the Community Technology Development Trust (CTDT).

10. The target group (*primary target beneficiaries*[13]) in Peru included 2,062 Quechua households across three zones (Low, Middle and Upper) in the district of Lares, Calca province in the region of Cusco, Peru. In Vietnam, the Programme's primary target beneficiaries initially included 6,720[14] households in 4 villages from 4 communes in 4 provinces in the upland area to the Northwest and Northeast of Hanoi, as well as in the North Central region of Vietnam, namely: Hoa Binh, Son La, Yen Bai and Thanh Hoa provinces, which are the poorest regions of Vietnam. Of these farming households, 20% are from the following ethnic groups: Nung, Tay, Cao Lan, Muong, and Thai in the North. The direct beneficiaries also included the poorest farming communities in the Mekong Delta region, totaling an outreach of 75,000 HH. In these communities, farmers primarily access seeds through purchase and the farming systems are dominated by hybrid varieties while traditional varieties are being lost. In Zimbabwe, the target group of the Programme were smallholder women and men farmers in villages within 4 low rainfall districts of Zimbabwe: Tsholotsho, Uzumba Maramba Pfungwe, and Chiredzi. A fourth district, Goromonzi, which receives a relatively higher rainfall, was selected to cover a more diverse agro-ecologies. As direct beneficiaries 5,800 households were targeted, including

[13] Primary target households are households located in the geographic areas where most *Programme* activities took place (2,062 households in Peru, 6,750 in Vietnam, and 6,720 in Zimbabwe) to which most Programme funding of IFAD was allocated.

[14] In Vietnam, after three-year implementation, the Programme reached 6,750 households in 5 provinces; Hoa Binh, Yen Bai, Thanh Hoa, Lao Cai and Son La.

3,000 female headed households, 1,000 orphan headed and 1,800 male headed households. 18,300 indirect beneficiaries were also reached.

2.2 GRANT IMPLEMENTATION ARRANGEMENTS

11. A Large *Grant Agreement* between IFAD and Oxfam Novib was signed for the total amount of USD 1,000,000, with grant number I-R-1371-OXFAM and Programme title: *Putting Lessons into Practice: Scaling up People's Biodiversity Management for Food Security*. The Effective Date of the Agreement was 20 July 2012 and the Amended Programme Completion Date was 31 March 2016 with an Amended Closing date of 30 September 2016. As co-financing, Oxfam Novib contributed USD 759,000, while Bioversity International (through the European Commission-IFAD grant) provided USD 300,000 (to carry out the baseline surveys in the three countries).

12. *Programme management*. A Global Programme Committee (GPC) was set up for the Programme's strategic decisions and supervision/oversight as well as to facilitate linking and learning and exchange amongst the three countries and the global activities. The Programme's GPC members were composed of the representative of each partner organization; which included executive directors of ANDES, CTDT and SEARICE, the Senior Programme Manager of Oxfam Novib and the IFAD account manager. Throughout the three year implementation, 6 GPC meetings were carried out: in Vietnam (2012), in Oman (back to back to the 5th Governing Body meeting of the ITPGRFA in 2013), in The Hague, the Netherlands (back to back to the inception meeting of the Sowing Diversity=Harvesting Security(SD=HS) Programme in March 2014), in Zimbabwe (during the mid-term evaluation in Zimbabwe in June 2013), in Driebergen, the Netherlands (back-to-back to the Global Consultation Meeting of the SD=HS Prorgamme, in January 2015) and in Rome (back-to-back to the 6th GB meeting of the ITPGRFA, September 2015). Some examples of activities covered by the GPC meetings include: i) development of baseline survey global framework, the first year of the Annual Workplan and Budget (AWPB), standard Programme management based on Oxfam Novib and IFAD funding conditions, ii) reviews of partners Farmer Field Schools (FFS), Participatory Plant Breeding (PPB) and Participatory Varietal Selection (PVS), gender scaling up framework and models; iii) internal end evaluation of the Programme (see Section 3.1.1 activity 1.1. End term meeting)

13. *Monitoring visits.* Monitoring visits were carried out annually by Oxfam Novib's team in coordination with IFAD's country Programmes including assessments of partners' narrative and audited financial statements against the results agreed upon. A supervision mission of IFAD took place for activities in Zimbabwe between 12-18 November 2013. The objective of the mission was to: (a) ensure that the Programme is moving towards the intended results; (b) support the resolution of known challenges; and (c) pursue the Programme's learning agenda. The implementing partner in Zimbabwe, the Community Technology Development Trust (CTDT), organized the mission schedule. The mission involved field visits to Goromonzi, Murehwa and UMP districts, where the mission members interviewed stakeholders to verify actual progress achieved and perception of relevance. The mission members were: Ms. Rima Alcadi (IFAD), Ms. Gigi Manicad (Oxfam Novib) and Mr. Patrick Kasasa (CTDT).

14. *Consolidated Annual Reports and Annual Work Plan and Budgets* (AWPB) were done by Oxfam Novib on the basis of the four partners' reports and AWPB.

2.3 CHANGES IN GRANT IMPLEMENTATION CONTEXT, GRANT DESIGN AND OUTREACH

15. Some changes were reported in the Annual reports for the period of 2012-2013 and 2013-2014. Despite these changes, all partners have been able to adhere to the respective AWPB for the three-year implementation and the results were reported subsequently in this report.

16. A delay incurred in the construction of the community seed bank in Peru was due to the complex procurement regulations and extensive consultation process amongst the six community members to agree on communal ground as the location of the seed bank. In the end, all parties agreed and the community of *Pampacorral* provided the terrain wherein the seed bank is currently located (*Parc Chalaco*). Additionally, change of local leadership contributed to the delay. A renewal of agreement with the new mayor took place in January 2015 since the earlier agreement signed in 2014 with the predecessor was not recognized. The construction started on 4 May 2015 and was completed 30 August 2015.

The construction of the seed bank in Pampacorral (Peru) using locally sourced and environmentally friendly materials and design (photo credit: Jiska van der Heide/Oxfam Novib)

3 REVIEW OF PERFORMANCE AND ACHIEVEMENTS BY COMPONENTS

3.1 REVIEW OF MAIN ACTIVITIES AND OUTPUTS DELIVERED

3.1.1 OBJECTIVE 1: DEVELOP LOCALLY APPROPRIATE ADAPTATION STRATEGIES FOR FOOD SECURITY BY BRIDGING TRADITIONAL KNOWLEDGE AND SCIENCE ON PGR AND INCORPORATING LOCAL PERCEPTIONS ON CLIMATE CHANGE

ACTIVITY 1.1.A. END TERM MEETING

16. Within the three-year Programme's implementation, 3 reviews were conducted to assess the achievements in the three countries and at global level. This includes 1) mid-term evaluation meeting in Zimbabwe (9-14 June 2014), 2) internal evaluation in Vietnam (3-9 September 2015) and 3) IFAD-led external evaluation (8-17 December 2015).

17. The September 2015 internal evaluation in Vietnam provided an opportunity for the four partners of the Programme to carry out an internal evaluation of the Programme achievements to take stock of lessons learnt, determine sustainability criteria and provide further guidance for the follow up phase.

18. *Five specific objectives* of the end term meeting include: 1) To capitalize on the rich experiences of all partners in an open and safe space to draw collective lessons and inspirations; 2) Review of baseline and endline results using the four key indicators (seed security, food security, gender inclusion and policy engagement), identify achievements and gaps; 3) Review of Farmer Field School (FFS) curriculum and the technical and empowering approach to improve draft as a deliverable to IFAD; 4) Sharpen agreements on the definition of beneficiaries, target groups and reach; and 5) Define areas for the next proposal and plan.

19. While the Programme covered three countries with a global component, the internal evaluation focused on *Vietnam as a case study*, with inputs from the global perspectives as well as from Peru and Zimbabwe. This was in line with IFAD's recommendation, given the evaluation limitation to cover all the three countries. The event was attended by the four partners, local partners of SEARICE in Vietnam, target communities including the involved government authorities. The venue was in Hanoi followed by field visits and community participation to the FFS sites in Bao Ai commune, Yen Binh district, Yen Bai province. Given the broad seed exchange and policy outreach of the Programme and the interlinkages between the target sites of the Programme in the North with the sites of other SEARICE's Programme in the South, the evaluation included a visit to Can Tho and the FFS sites in Kien Giang Province of South Vietnam. The visits to government authorities and communities provided an opportunity to learn and exchange experiences with the Programme's target beneficiaries and stakeholders and to explore potential improvements and follow-up plans based on identified needs and/or gaps. The rich reflections and findings of the internal evaluation served as inputs to a more in-depth independent external evaluation in December 2015.

20. The internal evaluation revealed that the Programme was successful in the way it had accomplished *to scale up and mainstream its innovations and the use of its tools*, and most importantly empowering indigenous peoples and small holder farmers.

21. The Programme delivered *successful results in all four major outcome areas*, evidenced by the following indicators: (1) 83,700 households reached in Peru, Vietnam and Zimbabwe (including 15,532 primary target households; or 82,400 inhabitants with at least 60% women); a total of 91 Farmer Field Schools (FFS) established; (2) Improvement in seed security, as illustrated by an increase in the accessibility of genetically diverse seeds; (3) Improvement in food security, with 30% increase in productivity, and better pest and disease resistance; (4) Local to global policy engagement, resulting in new local ordinances and global policy recommendations on Farmers' Rights. The Programme developed knowledge products, such as gender sensitive tools for scaling up (baseline and endline surveys; Plant Genetic Resources for Food and Agriculture/PGRFA Participatory toolkits; Farmer Field School/FFS curricula; women's video diaries) and developed a set of six scaling up pathways to further improve impact within and outside Programme areas. The Programme provided key insights into farmers' perceptions of climate change and how they adapted to it, using plant genetic resources for food and agriculture (PGRFA). The results of the Programme were submitted to the International Treaty on Plant Genetic Resources for Food and Agriculture (http://www.planttreaty.org/sites/default/files/gb6inf05e_Add1.pdf) and were submitted for inclusion in FAO's Report on the State of the World's Genetic Resources for Food and Agriculture.

22. One of the *key recommendations* of the internal evaluation for the next phase was to work on a more tailored participatory knowledge management (PKM) system that can build epistemic bridges between scientific and indigenous knowledge areas.

23. *Outputs* of the three reviews during the three year Programme's implementation are: 1) Minutes of the mid-term evaluation meeting (workshop proceeding report); 2) Internal Evaluation Report and 3) External Programme Evaluation report.

ACTIVITY 1.1.B. BASELINE AND ENDLINE REPORT

24. In 2012 and 2013 a baseline survey was conducted in the Programme countries (Peru, Vietnam, and Zimbabwe) to understand and build upon local peoples' perceptions, knowledge, and needs relating to climate change and to identify and strengthen their coping strategies. Another purpose was to generate knowledge amongst Programme partners and local peoples about what impacts climate change may have on food production and livelihoods, and which of these may also represent new opportunities for collaborative action. The baseline survey serves as a major input into collaboratively defining Oxfam Novib's and partners' Programme interventions with the IPSHF communities.

25. A formulated research framework was used to develop a survey questionnaire and a gender-sensitive participatory rural appraisal (PRA). These were applied through a Multiple Evidenced Based (MEB) approach developed by the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES).[15]

26. A *global framework* based on the formulated research framework was also developed. This framework was essential for global comparison and consolidation, and helped structure and guide

[15] http://www.ipbes.net

the analysis of the country findings that were used in combination with statistical data. The survey findings revealed gaps pertaining to the data on agrobiodiversity and farming systems, and the tools were modified accordingly.
Some findings of the baseline surveys are summarized below.

Box 1. Selected findings from *the Programme's* baseline surveys

- Farmers are aware that climate change is happening. How they respond depends on the effects of climate change on farming systems and crop performance.
- In times of increasingly irregular weather patterns, weather forecasts may help farmers improve their crop production planning. In addition to local methods steeped in tradition, meteorological weather forecasts have an increasing role to play, although they are not yet reaching all farmers.
- Diversification of crops and varieties constitutes farmers' response to climate change to varying extents. This is an essential climate change risk aversion measure.
- The practice of on-farm seed-saving is extremely important since seeds on the market are often unaffordable and/or not appropriate, and farmers have limited access to them. However, farm-saved seeds may be of poor quality and lack the necessary diversity.
- In particular, the PGRFA participatory toolkit for the baseline survey has been improved in the areas of analyzing crop diversity, seed security, climate perceptions, and adaptation strategies.

Source: Oxfam Novib, ANDES, CTDT, SEARICE, CGN-WUR (2013).

27. The following improvements have been made to the PGRFA participatory toolkit:[16] 1) Inclusion of a timeline of the agro-ecosystem and socio economic context that provides the basis for changes in crops and changes in the traits that are preferred by farmers; this provides a better understanding of why crops and varieties appear and disappear as they relate to changes in agro-ecosystems and the socio-economic conditions of IPSHF. 2) Better timeline analysis of seed sources and the practice of on-farm seed storage. 3) More support for the development of climate change adaptation strategies, including landscape approaches that take a strong bio-cultural and socio-economic perspective.

28. *Outputs:* 1) A briefing note was produced on the basis of the preliminary findings of the survey reports in the three countries were and was circulated during the 5th Governing Body meeting of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA); 2) A technical report on the baseline survey was submitted to Bioversity International and IFAD in September 2014; 3) Endline reports were developed by the country partners (ANDES, CTDT and SEARICE) and informed the development of the second briefing note circulated in the 6th Governing Body meeting of the ITPGRFA. The endline findings served as the basis of the internal evaluation meeting (see point 21 above; successful results in all four major outcome areas).

[16] The refined survey tools are: farmers' crop diversity; diversity in crop varieties; farmers' strategies to deal with changes in weather patterns; farmers' seed systems; farmers' diversity management; livelihood strategies; land-use options and practices; farmers' asset base; produce markets; farmers' adaptation strategies for changes in food demand, consumer prices, and availability of seed in the market.

ACTIVITY 1.2. JOINT SCIENTIFIC AND IPSHF ASSESSMENT OF CLIMATE CHANGE TRENDS AND TRADITIONAL PGR COPING STRATEGIES FOR FOOD SECURITY

29. The activities carried out under objective 1 of the four partners relate to participatory research, which incorporated traditional and scientific knowledge. In developing and/or refining an FFS curriculum and a training of trainers (ToT), the Programme focused on the effort to ensure that FFS allowed an environment that enables farmers and indigenous communities to propose solutions to challenges, such as lack of access to appropriate diversity, sub-optimal yields, pest and disease infestation, and climate change. The FFS should also help provide an understanding of how to implement those solutions.

30. A season-long FFS curriculum was developed and tested for specific crops for the 3 countries. The modules are being further modified to offer modules on different approaches to improve food production (selection between and within crops and breeding) and on different crop types,[17] possibly at different levels of integration (from farm to landscape). The FFS curriculum should also be tailored to accommodate the distinct roles of community members.[18] To date, improved curricula have been drafted, tested, and used in ToT sessions in Peru, Vietnam, and Zimbabwe; they will benefit FFS in other communities, i.e. Laos, Myanmar, also—part of the SD=HS Programme.

31. In relation to paragraph 30, CTDT and Oxfam Novib finalized the "*Facilitators' Field Guide for Farmer Field Schools on Participatory Plant Breeding in Maize, Pearl Millet, Sorghum and Groundnut*"; as one of the key deliverables attributed to the Programme as well as to SD=HS. The field guide covers topics and activities that need to be undertaken in a season-long FFS-PPB course. It is meant to function as the main reference for FFS facilitators to guide the FFS implementation. It also provides FFS facilitators with a framework for the preparation of regular and periodic reports. This version will be circulated more widely, also to stakeholders outside the Programme scope. An improved version will be published upon receipt of more feedback from other users.

32. In Peru, a review of national weather data for the past 30 years, and the installation of local weather stations provided data on past and current climate conditions and trends. The FFS was used to collect data on traditional knowledge; in particular several FFS sessions focused on climate change and mountain agro-biodiversity. The results of the research have been included in a database for use by communities, the governance of the *Parque Chalakuy* and the municipality of Lares.

33. As part of the Programme focus on biodiversity as an adaptation strategy, new potato varieties were introduced to the Lares area from the Potato Park. Despite carrying out analysis of the local conditions and preferences to select appropriate varieties for transfer, the initial 174 varieties introduced to the area did not fare well, with only 19 varieties surviving the first year. This experience highlights the challenges of climate change and the increased virulence of pest and diseases. This provided an opportunity for learning and further analysis of the factors affecting the loss was carried out, and a management and monitoring plan was developed for future seed transfers. A second transfer of 225 varieties was done under the new protocol for transfer of genetic material. Based on learning from

[17] self-pollinating, open-pollinating, vegetatively propagated

[18] related to gender, age, wealth and expertise

the first transfer, farmers'—especially women's—traditional knowledge, is embedded in the protocol. The repatriated materials were taken from the greenhouse to the field in the Potato Park, and then sent to Lares. This time the results of the transfer were successful, with all 225 varieties surviving to harvest. The results of this harvest were distributed to 119 families, with each receiving 20 varieties. Yields were also satisfactory, with higher yields in the middle zone, and slightly lower yields in the higher zone due to potato blight. Based on the earlier learning, a protocol is being drafted by the Potato Park, Lares communities, and ANDES[19] for the transfer of material from the Potato Park to Lares.

34. In Vietnam, the collaboration with the public sector in the FFS-PPB activities were facilitated by agricultural technicians primarily from the Plant Protection Department (PPD) through the Plant Protection Sub-Department (PPSD) of each province. Additional support was provided by staff of the Field Crop Research Institute which also provided Plant Genetic Resources (PGR) materials for farmers-led on-farm studies.

Refresher ToT in Yen Bai Province, Vietnam supported by, Technical Operations Adviser from Oxfam-Novib,(photo credit: SEARICE)

35. In Vietnam, a Training of Trainers and refresher ToT (on May 2015 in Yen Bai province, for the latter) were conducted to ensure the agricultural technicians have the capacity to facilitate knowledge and skills transfer to the farmers. At least 20 technicians participated in these ToT, refresher courses and the FFS for 115 days (1 cropping period) on plant variety selection, plant varietal enhancement and rehabilitation, line selection and other plant breeding themes conducted at various growth stages of the rice plant [20].

[19] ANDES. 2014.

[20] The technicians are normally without experience in plant breeding

36. In Zimbabwe 4 joint assessments of climate change trends with scientists from the meteorological services department and the University of Zimbabwe researchers were held with farmers who participated in Climate Field Schools (CFS). Participatory tools like seasonal calendars were used. It emerged from these assessments that there is an increase in the occurrence and severity of droughts. Traditional leaders were particularly keen in the joint assessments of climate change with scientists and have expressed keenness to continue working together as they seek to address some of the environmental challenges (e.g. veld fires and deforestation which they view as some of the causes leading to less rainfall) that are being faced within their communities. Both traditional knowledge and scientific data confirm this phenomenon.

37. In Zimbabwe, the FFS contributed to the introduction of important seed diversity through repatriations from the National Genebank and collaborative research with national research institutions and CIMMYT. The FFS also helped to encourage farmers to exchange seeds (i.e. pearl millet, sorghum and dry legumes). Furthermore, the Programme facilitated the repatriation for example, of 4 local sorghum varieties from the National Gene Bank to Programme communities in UMP and 2 to Programme communities in Chiredzi district. Additionally, 12 sorghum and 6 pearl millet advanced breeding lines, and additional varieties of other crops such as maize and cowpeas, were introduced in farmers' fields in collaboration with the Matopos research station.

38. The government played a very important role with their contribution to the Programme by providing extension services, staff support and farmer capacity building through the introduction of FFS on participatory varietal section. This has helped in improving the quality of seed that farmers harvest and deposit for conservation in the community seed banks. Farmers experienced an increase of between 3 – 7% in yield as they used quality seed of millets, sorghum and legumes during the 2013-2014 and 2014- 2015 agricultural seasons. Advanced sorghum and pearl millet, new varieties of groundnut, beans and Nerica rice (Goromonzi and UMP districts) were all introduced to farmers via Farmer Field Schools.

39. Plant Variety Selection (PVS) activities were conducted during the FFS within the target communities in Zimbabwe. The role of FFS's as a source of information, knowledge and seed is becoming increasingly important within and outside of the Programme communities. The FFS are being consulted by other farmers and local leaders on the type of crop and varieties to grow e.g. in the following season hence having an influence on the cropping patterns being adopted by Programme and non-Programme communities. There is an increasing demand coming from other farmers who formed additional groups to establish their own FFS's showing how important these have become to communities. Now old FFS's are mentoring new FFS's (so far 6 new FFS's have been established like this) so that they are able to carry out their own trials, training and collaborative research.

40. The Programme has been carrying out field days across the Programme sites. A total of 18 field days were held in Programme sites in Zimbabwe since inception. Farmers interacted with students and lecturers from universities, extension agents, researchers, agro dealers and policy makers to share knowledge and new information on the agronomy of the different crops in the FFSs.

41. *Outputs:* 1) *93 season-long FFS* were organized in Peru (7), Vietnam (21)[21], and Zimbabwe (65). A total of 2,614 farmers (1,890 women) directly participated in the three countries: 100 (60% women from all participants) in Peru; 498 (79% women from all participants) in Vietnam; and 1,292 (71% women from all participants) in Zimbabwe; 2) the FFS curriculum and a sample FFS field guide on maize, pearl millet, groundnuts (titled "*Facilitators' Field Guide for Farmer Field Schools on Participatory Plant Breeding in Maize, Pearl Millet, Sorghum and Groundnut"* was developed.

ACTIVITY 1.3. PARTICIPATORY SELECTION AND PILOTING OF INNOVATIVE PGR ADAPTATION STRATEGY INTEGRATING TRADITIONAL AND SCIENTIFIC KNOWLEDGE

42. In Vietnam 21 FFS-PPB were established and operational across the Programme's sites. These were held for at least 1 cropping season, focusing on rice since this is the main staple primarily produced by farmers. Technical skills and topics discussed and subsequently applied included varietal selection, line selection, cross breeding and rehabilitation. To date, a total of 630 farmers directly participated in the FFS-PPB. Of this figure, 380 farmers continued to be involved in field studies and subsequently comprised the membership of 15 seed production groups in the provinces in the North of Vietnam. The development of their own seeds through PPB is aimed addressing limited access to locally adapted varieties.

43. In Zimbabwe, staff from the Department of Research and Specialist Services of the Ministry of Agriculture and Agritex worked closely with the 65 Farmer Field Schools that were established during the implementation of the IFAD-Oxfam Novib funded Programme in selecting crop varieties that are adaptable to current climatic conditions. Advanced lines of sorghum and pearl millet from Matopos Research Institute were given to farmer field schools for open field testing. The experimental trials for 8 advanced lines of sorghum and 6 advanced lines of pearl millet were set up in the 65 FFS. The objective was to assess performance of these advanced lines in addition to other farmer varieties and improved varieties from corporate seed companies. The introduction of advanced lines will increase crop diversity among smallholder farmers in the Programme sites.

3.1.2 OBJECTIVE 2: EMPOWER INDIGENOUS PEOPLES AND SMALLHOLDER FARMERS (IPSHF) TO INFLUENCE LOCAL, NATIONAL, REGIONAL, AND INTERNATIONAL FOOD, AGRICULTURE, CLIMATE CHANGE POLICIES TOWARD REALISING THE RIGHT TO FOOD (RTF)

ACTIVITY 2.1. PARTICIPATORY ANALYSIS ON POLICY GAPS AND TRAINING NEEDS ANALYSIS USING GENDER LENS

44. In Peru, local and national level policy platforms served as sites of empowerment for indigenous men and women, as they increased understanding of local, national, regional and international policies on food, agriculture and climate change, and provided opportunities to engage with policy makers. Policy platforms include: The Lares Policy Platform; The Regional Platform on

[21] The number of FFS organized in Vietnam is in fact higher than what is reported here. The 21 FFS include those classes organized in the first year, while the same groups also learn other topics in the second year (only in Vietnam these classes were called field studies instead of FFS). If these field studies are included the total number of FFS organized in Vietnam is 83.

biodiversity and protection of Biocultural Heritage (see paragraph 65) in Cusco; the National Platform on Biocultural Innovations.

45. In Vietnam, 83 Farmers' Field Days (FFD) and at least 2 Farmer Technical and Policy Conference (FTPC) were organized as a forum for the farmers to present their accomplishments and progress in relation to on-going PPB related activities, as well as to articulate policy concerns, issues and needs in relation to agricultural production and policy development. Concrete gains from FFDs included the allocation by local authorities of land for field study sites, integration of farmers' initiatives in provincial plans (i.e. rehabilitation of the Lech rice variety), allowing seed exchange within the commune such as in the case of Tan Vinh Commune in Hoa Binh Province, and something as simple as giving recognition to a farmer preferred and selected variety (i.e. M2 variety, People's Committee, Da Loc Commune, Thanh Hoa Province).

ACTIVITY 2.2. LOCAL AND GLOBAL POLICY REFLECTIONS AND ENGAGEMENT (ORDINANCES, MOBILIZATIONS, SUBMISSIONS TO INTERNATIONAL BODIES); INCLUDING PARTICIPATORY DEVELOPMENT OF FACT SHEETS AND POLICY NARRATIVES

46. In Peru, important policy events for ANDES included organizing a National Level Round Table, participation of ANDES staff and local farmers in UNFCC COP 20 in Lima and COP 21 in Paris. ANDES and local communities also successfully took action against the National Institute for Agricultural Innovation (INIA) in relation to Plant Breeders Rights claims for more than fifty traditional potato varieties from the Potato Park. This resulted in INIA withdrawing their PBR claims. Analysis of relevant existing policies was developed and shared with local communities in a policy matrix. Ordinances were developed at the municipal, regional and national levels, addressing food and seed security, promotion and protection of barter markets, and local climate adaptation plans.

47. In Vietnam, the Programme has allowed review of relevant government regulations as exemplified by the re-enactment of the Decision 35/2008/QD-BNN on "Production Management of Farm Households' Plant Varieties". The original policy was issued at the national level by the Ministry of Agriculture and Rural Development (MARD) in early 2008 supporting on-farm seed conservation and development, a result of early policy lobbying done through CBDC-BUCAP[22], predecessor of this Programme. Despite its existence, the Decision was never implemented by local agricultural officials.

48. In Zimbabwe, the Programme has managed to create collaborative synergies with various institutions including several members of parliament, academics from university and government research stations and CGIAR[23] Centres (ICRISAT[24], CIMMYT[25] and CIAT[26]). The synergies have resulted in improved relations between farmers and local institutions and created an avenue for farmers to benefit from the expertise and resources offered by these institutions.

[22] Community Biodiversity Development and Conservation- Biodiversity Use and Conservation in Asia Programme

[23] Consultative Group for International Agricultural Research

[24] International Crops Research Institute for the Semi-Arid Tropics

[25] International Maize and Wheat Improvement Center

[26] The International Center for Tropical Agriculture

49. The Policy and Advocacy unit at CTDT held 4 workshops with Ministry of Agriculture officials, farmer advocates, policy makers, extension agents, researchers, seed industry and academics to analyze national seed laws and policies including SADC[27] Seed Harmonization Protocols and the question of how they are and will impact on smallholder farmers' livelihoods. The Seed Harmonization Protocol will seriously affect smallholder farmers' local seed systems because it will limit their access to seeds if it is implemented as in the Protocol text. Since Zimbabwe has not yet domesticated the Protocol, it did not impact the IFAD Programme activities negatively.

50. The Programme in Zimbabwe managed to conduct awareness raising workshops in the Programme districts on Farmers' Rights and Access Benefit and Sharing regimes. A total of 565 farmers, local authority officials and traditional leaders were present during the awareness raising workshops. Traditional leaders in UMP have initiated discussions with their local members of parliament to initiate debates in parliament on why local seed systems are not protected and supported to the same level as plant breeders.

51. The Programme in Zimbabwe has therefore been influencing the debate on the implementation of Farmers Rights in harmony with the International Treaty debate in the country in addition to the SADC and ARIPO[28] Seed Harmonization protocols.

52. The Programme works in multiple countries with a global agenda. The richness in the diversity of partners is consolidated into a global framework. This is needed to ensure results from one country are comparable to others. The aggregation of country experiences is one of the key strengths of the Programme and it is an evidence-based tool for policy engagement at global level. The local-to-global synthesis is done at global level by Oxfam Novib, and this global synthesis was then used as a policy engagement tool. The global synthesis produced include: a briefing note, submission to the ITPGRFA, submission of case studies to the State of the World's Report on Biodiversity for Food and Agriculture (SoWBFA).

53. Two briefing notes (global) were published as inputs to the 5th and 6th Sessions of the GB meeting of the ITPGRFA in Oman (2013) and Rome (2015) respectively. The title of the first briefing note was "Building on farmers' perception and traditional knowledge: biodiversity management for climate change" and was based on the initial findings of the baseline surveys in the three countries. The second briefing note was "From lessons to practice and impact: Scaling up pathways in people's biodiversity management". It presented the innovation and learning of the Programme's implementation which was conceptualized as the six scaling up pathways. Additionally, the briefing note formed the basis of the submission on Farmers' Rights to the 6th Session of the GB of the ITPGRFA[29] and was distributed as an official working document of GB 6. The endline findings of the Programme with an emphasis on women's roles in seed management has been submitted as a case study for inclusion in the FAO's Report on the State of the World's Genetic Resources for Food and Agriculture. The title of the case study was "Women's roles in biodiversity management. From lessons to practice and impact: Scaling up pathways in people's biodiversity management".

[27] Southern African Development Community

[28] African Regional Intellectual Property Organization

[29] Available at http://www.planttreaty.org/sites/default/files/gb6inf05e_Add1.pdf

54. Two side events were organized in Oman (September 2013) and Rome (September 2015) jointly by the four partners of the Programme, during the 5th and 6th sessions of the GB meeting of the ITPGRFA. . During the first side event, "*Farmers' Rights in Action: Scaling up people's biodiversity management for food security*", the four implementing partners presented the findings of the baseline survey, as well as the overall plans and activities of the grant Programme. The side event held in Oman titled *"Stories of Change. Pathways for scaling-up peoples' exercise of farmers' rights and the sustainable use of plant genetic resources"* was well attended by at least 40 participants. The latter was also attended by two guest discussants, including the Head of the Indonesian Agency for Agricultural Research and Development as the representative of the Indonesian delegation. Indonesia is the Chair of the 7th session of the GB meeting of the ITPGRFA and will host a global consultation on Farmers' Rights in 2016. The Indonesian representative expressed his appreciation and was impressed by the results of the Programme in Vietnam; wherein the Programme was mainstreamed and received full support of the Vietnamese government. The option for future collaboration to adopt the scaling up approach of the Programme in Indonesia was raised, especially since mainstreaming of FFS at national level remains a challenge. He cordially invited the Programme's partners to attend the global consultation meeting in 2016.

The side event during the 6th session of the GB meeting of the ITPGRFA (photo credit: Anita Dohar/Oxfam Novib)

55. Another side event was organized at the global level at the 15th Regular Session of the Commission on Genetic Resources for Food and Agriculture (CGRFA) in 2015, highlighting the Programme results and the initial findings of its study on seed laws. Following active lobbying by Civil Society Organizations (CSOs) before and during the 15th regular session of the Commission the Voluntary Guide for National Seed Policy Formulation was approved; it included texts suggested by SD=HS partners and other CSOs. The approval of the Guide is significant because it recognizes and supports the importance of informal seed systems unlike most seed policies and laws that cater only to the formal sector. Despite the Guide being voluntary, it is hoped that many developing countries will consult it in response to the need to formulate or revise their national seed regimes. CSOs and farmers organizations will also use the Guide as a reference when developing proposals to their governments

for a more inclusive seed systems approach, which is vital for the national economy and a country's food and nutrition security.

56. Another output that is attributed to both IFAD-Oxfam Novib and the SD=HS Programme is the national policy reflections on the impact of seed laws and policies in Peru, Vietnam and Zimbabwe to inform the global overview.

ACTIVITY 2.3. LEARNING MODULE DEVELOPED FOR CAPACITY DEVELOPMENT FOR FARMER ADVOCATES WITHIN FFS

57. In Peru, although a national newspaper insert were planned for COP 20, this activity was not done as the costs were very high because of the season. Instead ANDES focused on capacity building and awareness raising within the COP, supporting participation of farmers from the Barter Market Park, the Potato Park, the Vilcanota Spiritual Park, and ANDES staff in the COP20. Farmers presented and participated in official side events, were active in the Indigenous Forum, networked with scientists and NGOs, and lobbied policy makers. Furthermore, ANDES and the Potato Park organized an international exchange in the Potato Park for participants of the COP 20.

3.1.3 OBJECTIVE 3: STRENGTHEN THE ADAPTIVE CAPACITIES OF IPSHF IN PGR CONSERVATION, ACCESS AND SUSTAINABLE USE, BY SCALING UP SUCCESSFUL AND/OR INNOVATIVE MODELS

ACTIVITY 3.1. TECHNICAL CAPACITY BUILDING OF IPSHF FOR MANAGEMENT OF PGR AT DIFFERENT SCALES (GENETIC, FARM AND LANDSCAPE)

57. In Vietnam, gender sensitive learning modules for FFS was developed. The FFS modules for seed management, SRI and IPM have been modified to cater to women's needs. As an illustration, instead of preparing seedbeds for seed germination, the women expressed their preference to use light weight materials or plastic containers as tray since they are much more convenient, time saving and prevent back ache.

58. Based on inputs from Vietnam, at the global level Oxfam Novib incorporated gender modules as one of the special topics of the Facilitators' Field Guide (paragraph 31). One of the modules examines the respective roles and contributions of women and men in agriculture, particularly in the conservation, development and management of on-farm seed diversity. It analyses some prevailing practices and their underlying assumptions bearing on equity and sustainable seed management. It offers a perspective through which values and attitudes may be affirmed or modified, and practices changed.

59. The inclusion of gender role awareness in the FFS curriculum was important to break social and mobility barriers for women. For example, consciously selecting women participants and running training of trainers sessions for women are important to sustain and further scale up gender-sensitive FFS to reach more women. This helped the Programme break the traditional bias against women's participation in training sessions. Furthermore, the fact that FFS are conducted *in-situ* meant women could not be excluded for reasons such as not being able to reach the training site. Additionally, household negotiations were included in the FFS guide to relieve women of household chores one morning per week to participate in the FFS session. This is important since collecting data

from the FFS sites is best done just after the sunrise when insects are easier to observe or gather while this too is the busiest time for women's households tasks.

ACTIVITY 3.2. DEVELOPMENT AND PILOTING OF PATHWAYS FOR SCALING UP PGR CONSERVATION, ACCESS AND SUSTAINABLE USE IN THE 3 COUNTRIES, INCLUDING BARTER TRADE AND MARKET ACCESS

60. At the global level, on the basis of innovations and learning from the 3 countries, 6 scaling up pathways were formulated and published as a briefing note. These scaling up pathways were also submitted to the 6th session of the GB of the ITPGRFA on Farmers' Rights (see chapter 7) and was distributed as one of the official working documents at GB 6.

61. In Peru, next to the Biocultural Territory[30] (see paragraph 65), FFS were a main vehicle towards strengthening local capacity for plant genetic resource conservation, access and sustainable use. To date, 7 FFS's were formed and trained on the establishment of the Biocultural Heritage Territory and food security. A group of 6 local researchers (3 men and 3 women) were selected as leaders in community research and capacity development in the FFS. These locally recruited researchers (*tecnicos locales*) managed the weather stations, implemented the baseline research, and led the PPB and PVS processes.

62. At the country level, in particular in Vietnam and Zimbabwe, another major knowledge dissemination tool that is being deployed is the *Flipcam*. The videos the women farmers produced with the flipcams proved to be an effective advocacy tool towards government authorities and other stakeholders. This has raised awareness of these stakeholders on the technical capacities and traditional knowledge of farmers, in particular women, in selection and breeding. Women's experiences in the FFS, i.e. carrying out selection, rehabilitation and/or cross breeding by combining their local knowledge with scientific knowledge were difficult to document systematically. The use of flipcams provided a way for the women farmers to independently capture their learning activities in the form of video diaries. Not only are these video diaries an effective media for advocacy, they helped women share and exchange the learning from FFS with their peers in neighboring villages who might face similar challenges. The links to the videos in Vietnam and Zimbabwe are listed below.

63. The links to the flipcam videos from Vietnam:

1. ToT & FFS in North Vietnam http://youtu.be/Oy1UrjdfeIw;
2. FFS in Lao Cai Province, North Vietnam https://www.youtube.com/watch?v=3Ths06ExSMQ;
3. FFS in Son La Province, North Vietnam https://www.youtube.com/watch?v=bfThANAQ3Js;
4. FFS in Bao Ai Commune, Yen Bai Province, North Vietnam https://www.youtube.com/watch?v=xaDq-zBaRMQ&feature=youtu.be

The links to the flipcam videos from Zimbabwe:

Video 1 (Agro-ecosystem analysis/AESA): https://www.youtube.com/watch?v=L5c_2gPxxSU
Video 2 (Mashambanhaka FFS): https://www.youtube.com/watch?v=MZWpTKhAphY

[30] Indigenous landscape approach (Bio-cultural Territory) enhances a key objective of on-farm conservation: maintaining crop evolution in farmers' fields, farms, and landscapes. The approach enhances farmers' efforts to adapt landraces to their changing field conditions and socio-cultural preferences (http://ipcca.info/about-parque-de-la-papa)

Video 3 (Seed bank and seed fair):
https://www.youtube.com/watch?v=-HKEFGGAUQU&feature=youtu.be

FFS women farmers of Chieng Sinh ward, Son La city, are happily learning to use the flipcam (photo credit SEARICE)

ACTIVITY 3.3. DEVELOPMENT OF BIOCULTURAL PROTOCOL

64. In Peru, a Biocultural Territory was established during the course of the Programme, representing efforts to scale up the innovative model of the Potato Park. The model is based on community-managed development based on conservation of the rich and unique local bio-cultural heritage. In this case, the bio-cultural territory, *Parque Chalakuy*, established by six communities in the Lares watershed, highlights the central role of the barter market park in food security and nutrition.

65. The *Parque Chalakuy* has been registered and basic statutes developed, and the management association has been implemented. Several groups have been formed, including a group of local researchers, a Barter Market Users association, and a gastronomy group.

66. Installation of important infrastructure for the Park has been key to the scaling up of the biocultural territory model. A *seed bank for potato and maize in Pampacorral* was constructed on communal ground, at approximately 4,100 meter above sea level with seed storage as the main purpose. The building serves as a natural refrigerator, with low windows which allow the cool wind to enter the building easily. It houses two pools of water that freeze at night. The wind distributes the cold air inside the building, allowing the seeds to be kept in low temperature environment. The seed bank will be used to store potato and maize seeds for farmers' experimentation. The consultative process for selection of the site and purpose involved approval from local community assemblies. ANDES hired an architect to develop a design in harmony with the landscape and using local materials. The company hired to lead the construction employed local labour and worked with local communities to source as many local materials as possible. The infrastructure is formally in the hands of the communities of the *Parque Chalakuy*.

The seed bank in Pampacorral. Photo credit: Jiska van der Heide/Oxfam Novib

3.2 ASSESSMENTS OF EFFECTIVENESS IN ACHIEVING COMPONENTS OBJECTIVES

3.2.1 OBJECTIVE 1: DEVELOP LOCALLY APPROPRIATE ADAPTATION STRATEGIES FOR FOOD SECURITY BY BRIDGING TRADITIONAL KNOWLEDGE AND SCIENCE ON PGR AND INCORPORATING LOCAL PERCEPTIONS ON CLIMATE CHANGE

68. Adaptation to climate change formed a central theme of the Programme. Global climate change predictions point to an increasingly drier climate in Zimbabwe, to higher temperatures in the Andes, and to more irregular weather patterns in Vietnam. As reported in Oxfam Novib's 2013 briefing note,[31] the baseline survey concluded that farmers' experiences concur with these global predictions. Farmers confirm that they have been exposed to observable changes (onset/cessation, intensity, and duration of weather events) and have responded by adapting their farming systems and crop choices. They adapt by reviewing their traditional knowledge of weather predictions, biodiversity management, and cropping calendars. In addition, farmers in Vietnam and Zimbabwe resort to short duration varieties to adapt to climate change impact, especially drought and unpredictable weather patterns. Farmers in Peru have perceived considerably more incidences of extreme weather events and have associated an increase in pest and disease infestations with these events. They responded by adopting traditional potato varieties that were more flood and drought tolerant. A new community seed bank strengthened farmers' capacity to store seeds of local varieties; increases in extreme climatic events are increasing the risk of field losses, reducing the capacity to save and share seed.

69. Throughout *the Programme*, farmers have consciously been assisted to take climate change into account in their decision-making. The inclusion of climate related tools enabled *exchanges and comparison between farmers' perception of climate change and meteorological data* that would not have taken place otherwise. Another example of contribution of *the Programme* towards Objective 1 is the formalized partnership with one of the largest providers of mobile communication services in Zimbabwe, Econet Wireless. This partnership means that 450 farmers who have registered with 'Eco-farmer' (an agricultural information service) receive up-to-date agricultural information, including weather forecasts.

[31] 'Building on farmers' perception and traditional knowledge: Biodiversity management for climate change and adaptation strategies' (Oxfam Novib et al. 2013)

70. In terms of contributing to Objective 1, the Programme developed a well-designed FFS that proved to be an effective instrument since it uses experiential learning and participatory approaches, allowing the participants to come with their own solutions and/or adaptation strategies. Through the FFS models, communities in Peru and Zimbabwe were able *to increase diversity at both crop and variety levels as their adaptation strategies*. In Peru, efforts were concentrated on the proper management (conservation and use) of potato varieties that were repatriated to the communities, but are threatened as a result of climate change. This approach places emphasis on maintaining genetic diversity in the framework of bio-cultural processes that support on going on-farm conservation. FFS in Zimbabwe responded to climate change by focusing on the (re)-introduction of more diversified crops into the farming systems, specifically staples such as cereals, pulses, and root and tuber crops, that traditionally played a role in the farming system. Such an increase in crop diversity in a farming system aims to make the system more *resilient to adverse weather conditions*. Using this model, farming systems benefit either from the addition of suitable crops absent from or rare in the system or from having an enhanced number of well-adapted varieties of staple crops to choose from. In Vietnam, the FFS paid specific attention to a recent approach in rice cultivation—System of Rice Intensification (SRI).[32] An important Programme innovation is the FFS approach in SRI that enabled farmers to adapt it to their specific agro-ecologies, in other words, tailor it to their own context. This approach focuses on an improved set of varieties, often of staple crops, and tends to focus on selection of lines from segregating populations of crosses obtained from breeding Programmes.

71. In sum, the Programme's *contribution towards Objective 1* is as follows; IPSHF have increased their technical capacities and strengthened their local knowledge with scientific knowledge on seed management, crop improvement and weather forecasting. This is further strengthened by the facilitated access to public sector genetic resources through the Programme's FFS, which ultimately increased their access to PGR diversity. As a result, the farmers in the three countries were able to adapt and/or develop a significant number of locally adapted varieties. Alliance with the public sector is essential for farmers to *sustain all the necessary activitie*s to allow them to continuously adapt their farming systems, especially given the fast changing climate and market pressure. The empowerment of farmers and local stakeholders is the key for sustained adaptation.

3.2.2 OBJECTIVE 2: EMPOWER IPSHF TO INFLUENCE LOCAL, NATIONAL, REGIONAL, AND INTERNATIONAL FOOD, AGRICULTURE, CLIMATE CHANGE POLICIES TOWARD REALISING THE RIGHT TO FOOD (RTF)

72. In terms of *contributing to Objective 2*, the Programme enabled policy engagement in many forums at several levels: local, national, and global. The Programme facilitated increased *local communities' awareness of seed policies*, and their capacity to *engage in and influence* local and global food, agriculture, and climate change policies. This is especially relevant since a range of seed policies embodied in national laws and regulations, including those coordinated at the international level, greatly influence smallholder seed systems. The Programme raised the communities' awareness of these national and international agreements, enabling them to analyse not only the impacts of the policies on

[32] Presentation by R. Selvaraju on System of Rice Intensification at the fifth annual investment days in Rome, 2013. http://www.fao.org/fileadmin/templates/tci/pdf/Investment_Days_2013/17_December/1c._System_of_Rice_Intensification__SRI__-_Selvaraju.pdf

their seed systems, but also how they may be able to influence such policies. This formed another contribution of the Programme towards Objective 2 *increased awareness by those in the development field* of the *barriers faced by farmers*, and their capacity to adapt and propose ways to further strengthen and support farmers' role in PGR management and food security.

3.2.1 OBJECTIVE 3: STRENGTHEN THE ADAPTIVE CAPACITIES OF IPSHF IN PGR CONSERVATION, ACCESS AND SUSTAINABLE USE, BY SCALING UP SUCCESSFUL AND/OR INNOVATIVE MODELS

73. Through the well functioning of 91 FFS in the three countries and other innovative models as described by the six scaling up pathways, the Programme has facilitated farmers to maintain and use more agro-biodiversity, to carry out local crop improvement serving their diverse needs and interest and to adapt to climate change. Farmers indeed reported improvements in seed and food security and confirmed the relevance of the Programme as they adapted to climate change (see for example, learning note in Vietnam). A citation by one of the farmer during the external evaluation, " in case if more support (from the Programme) does not come, then we would continue by ourselves", clearly demonstrated the relevance and potential for sustainability of the Programme's innovative models for farmers to adapt to climate change.

4 ASSESSMENT OF IMPACT AND IMPACT ATTRIBUTION TOWARDS IFAD'S STRATEGIC OBJECTIVES

74. The Programme is in line with all of IFAD's 5 strategic framework objectives[33]. In terms of thematic engagements, it is particularly relevant to (i), (ii), (vii), and (viii) i.e., respectively: natural resources (biodiversity); climate change adaptation; technical skills development; and support to rural producers' organizations.

75. The Programme has improved agricultural methodologies to create more climate resilience at the levels of plants, farms and landscape/ecosystems by scaling up participatory innovations - such as the PGRFA Participatory Toolkit, FFS, Participatory Plant Breeding (PPB) and bio-cultural community protocols. The demonstration and promotion of successful models and policies, and the scaling up of these models and approaches are consistent with IFAD's approaches.

76. In the strategic framework 2016-2025[34], IFAD reconfirmed its commitment to focus on vulnerable and marginalized rural groups such as women, youth and indigenous peoples. In line with this, the Programme has targeted and built on the position and agency of *women as managers of biodiversity* in household and community food security. To date, the Programme has reached 82,400 individuals in the three countries; of which around 49,440 (or 60 percent) were women. A total of 1,890 women (70 percent from all participants) took part and have benefitted from the FFS organized in the three countries. The Programme worked with *indigenous peoples* in Peru and Vietnam and poor rural communities in Zimbabwe. They were selected on the basis of their limited access to and/or use of good quality and sufficiently broad genetic base of seeds. Social and cultural norms have proved to limit their access to a range of productive assets and/or ability to benefit from public services. These factors exacerbated the indigenous peoples' vulnerability in adapting to climate change. At the same time, the Programme fully acknowledged the *richness of traditional knowledge* of the indigenous peoples, hence has facilitated a better understanding and exchange between the traditional and scientific knowledge through the FFS.

77. Concerning *linkages to other development Programmes*, the IFAD Country Programme Managers (CPMs) for Peru and Vietnam were approached to explore areas for cooperation. In the case of Zimbabwe, until recently, there were no IFAD-funded investment Programmes since January 2006. In 2015, IFAD is resuming its cooperation with Zimbabwe and will work in four Programme components; namely rehabilitation and development of irrigation infrastructure, agricultural credit, institutional strengthening and market access and business development[35]. CTDT's strong partnership with government, from local to national levels, and its recognised expertise in working with smallholder farmers for sustainable development could prove to be valuable for IFAD since it is currently re-establishing its country Programme.

[33] available at https://www.ifad.org/documents/10180/3e9c6239-449e-4dba-951a-849e301616d5

[34] IFAD. 2016. IFAD Strategic Framework 2016-2025. Enabling inclusive and sustainable rural transformation. ISBN 978-92-9072-651-7. Rome: 2016.

[35] http://www.voazimbabwe.com/a/ifad-sets-aside-50-million-for-revitalizing-zimbabwe-irrigation-schemes/3092168.html

78. In Peru, the Programme has been of direct relevance to some aspects of the country's Strategic Objective (SO1): "Enhance smallholder farmers' property and resources through better *natural resource management*, land-titling and resolution of conflicts over land tenure" and SO2: "*Improve smallholders' access to technical assistance* and financial services by developing markets, increasing local capacity to contract services, and strengthening institutional and private sector service providers".

79. In Vietnam, the Programme contributed to the country's strategic objectives for the period of 2012-2017 in particular to SO3:"*Upland poor communities* secure access to, and derive sustained benefits from, productive natural assets", and SO4:"The *rural poor contribute to pro-poor agricultural, market driven policy processes* at sub-national levels". The Programme concretely contributed to IFAD operations by building on best practices and scaling up the work with the ethnic groups in four villages of the upland areas to the northwest and northeast of Hanoi as well as in the north central region of Vietnam (Hoa Binh, Son La, Yen Bai and Thanh Hoa provinces). Furthermore, the Programme had direct relevance on the following operation: "Programme for Adaptation to Climate Change in the Mekong Delta in Ben Tre and Tra Vinh provinces".

Participatory plant breeding exercise in North Vietnam (Photo credit: Hoang Huy/Oxfam Novib)

80. IFAD puts high importance towards "*Evidence base for adaptation*" and "*Knowledge management and dissemination*". The Programme directly contributed to these components through the PGRFA Participatory Toolkit, the established baseline and endline survey questionnaire, gender sensitive PRA tools, FFS as well as other innovative models contributing for sustainable agriculture and/or climate change adaptation.

5 PROGRAMME COSTS AND FINANCING

81. We refer to Annex 2 Statement of Expenditure and Annex 3 Detailed Overview of 3 year budget and AWPB year 3 compared to expenditure year 3 (15 months) Annex 3c Comprehensive Review of Years 1-3 Expenses compared to Budget.

82. In Table 1 below you will find the Programme costs by country and by cost category including a comparison to the Y1-Y3 budget:

Table 1. Project Costs by Country and Category (1000's USD and percentage) compared to Budget

Cost Categories:	PERU	ZIMBABWE	VIETNAM	GLOBAL	TOTAL	as% Total
Original Y1-Y3 budget (as contract)	$430	$430	$430	$469	**$1.759**	
Revised Y1-Y3 expected spending (1-12-2014) (1)	$409	$430	$448	$525	**$1.811**	
Y3 internal re-alloction from Global to Vietnam for IFAD Evaluation			56	-56	0	
Revised Y1-Y3 budget (after re-allocation)	**$409**	**$430**	**$504**	**$469**	**$1.811**	
Y1-Y3 Actual expenses:						
Staff (total)	$158	$116	$64	$267	**$604**	34%
Consultancies	$35	$10	$25	$57	**$127**	7%
Travel (flight tickets, lodging, food or per diem)	$10	$78	$59	$26	**$172**	10%
Research	$11	$9	$142	$16	**$178**	10%
Trainings & workshops (transfer of knowledge)	$31	$67	$58	$28	**$184**	10%
Conference & meetings (exchange of information, lobby & network)	$11	$100	$106	$0	**$217**	12%
Equipment	$111	$2	$0	$0	**$112**	6%
Publications	$3	$6	$5	$20	**$34**	2%
Subtotal Programme Components (direct cost)	**$370**	**$388**	**$457**	**$414**	**$1.629**	**91%**
Partner project support (indirect cost)	$37	$39	$43	$45	**$163**	9%
Total expenditures	**$407**	**$426**	**$500**	**$459**	**$1.792**	**100%**
Depletion original Y1-Y3 budget as contract	95%	99%	116%	98%	102%	
Depletion revised Y1-Y3 expected spending as at 1-12-2014	99%	99%	99%	98%	99%	

(1) this includes Y1 and Y2 actual spent plus Y3 revised budget after re-allocations between countries/ Global.

83. In the table above Programme costs are reported per country and per cost category and compared to original budget (as contract). At the level of the counterparts, Andes in Peru spent 95% of its original Y1-Y3 budget USD 430K, CTDT spent 99% of its original Y1-Y3 budget USD 430K, Searice spent 116% of its original Y1-Y3 budget USD 430K, and ON Global spent 98% of its original Y1-Y3 budget USD 469K.

84. As indicated in last year Annual Progress Report (Year 2), a year 3 revised budget (as of 1-12-2014) as well as expected spending were reported to IFAD, see page 74. In the table above Programme costs are reported per country and per cost category and compared to the budget. At the level of the counterparts, Andes in Peru spent 99% of its Y1-Y3 expected spending USD 409K, CTDT

spent 99% of its Y1-Y3 expected spending USD 430K, Searice spent 98% of its Y1-Y3 expected spending USD 504K (taking into account the year 3 internal re-allocation of USD 56K from Global to Vietnam for the IFAD Evaluation), and ON Global spent 98% of its Y1-Y3 expected spending USD 469K (taking into the year 3 internal re-allocation of USD 56K from Global to Vietnam for the IFAD Evaluation).

85. Overall compared to the original contract budget depletion is 102% and compared to Y1-Y3 expected spending is 99%.

6 ASSESSMENT OF GRANT MANAGEMENT AND PARTNERS' PERFORMANCE

86. The recipient of the IFAD grant is Oxfam Novib. The Programme Team at Oxfam Novib is responsible for the overall management of the Programme implementation and was led by the Senior Programme Manager (SPM), who is a senior specialist in people-centred biodiversity management and policies. The SPM was actively engaged in management and implementation, supported by a Programme and financial officers, Scientific Advisor (SA) and a team administrator. Towards the end of the implementation the IFAD-Oxfam Novib Programme was also supported by a Technical Operation Advisor (ToA)[36]. The advisors ensured technical backstopping towards the FFS and FFS curriculum and ToT developments as well scientific rigour of the knowledge products respectively. The SPM was also responsible for the implementation of the global dimension of the Programme, i.e., linking local policy work to global levels, and vice versa. As cited by the Grants Portfolio Adviser during the supervision mission[37], Oxfam Novib was considered to perform extremely well on both these fronts, as coordinator of the Programme activities as well as implementing the global-level activities.

87. In terms of coordination of the global Programme, according to the supervisory mission of the IFAD grants manager, the Oxfam Novib SPM and her team have invested significant effort in ensuring that all implementing partners have a clear and unified understanding of the Programme approach, objectives, outcomes, components and activities. The SPM ably leverages on each partner's comparative advantage, and is sensitive to ensuring that the approach and activities are relevant and specific to the differing country contexts, while at the same time identifying common ground to ensure that lessons learnt and results can be meaningfully aggregated and compared, so that "the whole is greater than the sum of its parts." This participatory and open approach has been thoroughly and consistently pursued, starting from the design of the Programme. The Oxfam Novib leadership has proactively encouraged the implementing partners to focus and further develop their unique strengths, stimulating exchange of knowledge and experience. Thus "experiential learning" is happening at all levels –not only in the FFS context. Concerning implementation of global-level activities, paragraph 45 to 49, give some overview of the major achievements reached, specifically with regard to global policy engagement based on the learning ensuing from the country-level activities. As highlighted in the Executive Summary, Oxfam Novib's performance in mobilising additional resources was also exceptional (Euros 21.6 million from Sida). Oxfam Novib is also performing very well with regard to establishing global-level partnerships and knowledge management and knowledge sharing.

88. In Peru, Programme implementation of ANDES in particular at the community level is globally recognized. One of the pillars contributing to this is the well-organised on-the-ground implementation by the local technicians (*tecnicos locales*). ANDES' capacity in establishing and maintaining international alliances is also worth noting, hence providing good visibility towards the Programme and IFAD as one of its major donors.

[36] SD=HS Programme funded by Sida, which was a scaled up from the IFAD-Oxfam Novib Programme, allowed the global partner, Oxfam Novib, to increase the support to the country partners through the ToA.

[37] Aide-mémoire mid-term evaluation in Zimbabwe (IFAD 2013)

89. In Vietnam, SEARICE, jointly with Centre for Sustainable Rural Development (SRD) in the North and with the Mekong Delta Institute (MDI) in the South performed very well in terms of Programme management as well as in establishing partnership with the Food Crop Research Institute (FCRI) and the Ministry of Agriculture and Rural Development (MARD) at district and provincial levels. This includes building alliances with the Plant Protection Sub-Department (PPSD) of MARD who has long-standing experience with the implementation of FFS classes for Integrated Pest Management (IPM).

90. As confirmed by the IFAD grants manager, with regards to the implementing partner in Zimbabwe, CTDT, its management performance in Zimbabwe is excellent.[38]This is also observed in the degree of technical expertise coupled with the organization's skill in establishing partnerships with all major stakeholders, ranging from the farmers; from whom CTDT obviously enjoyed their full trust, to the University, who respected CTDT for their strong engagement with the communities as well as their knowledge, to government –ranging from the local to the national levels, the private sector and other global centres of excellence.

[38] Aide-mémoire mid-term evaluation in Zimbabwe (IFAD 2013)

7 INNOVATION, REPLICATION AND SCALING UP

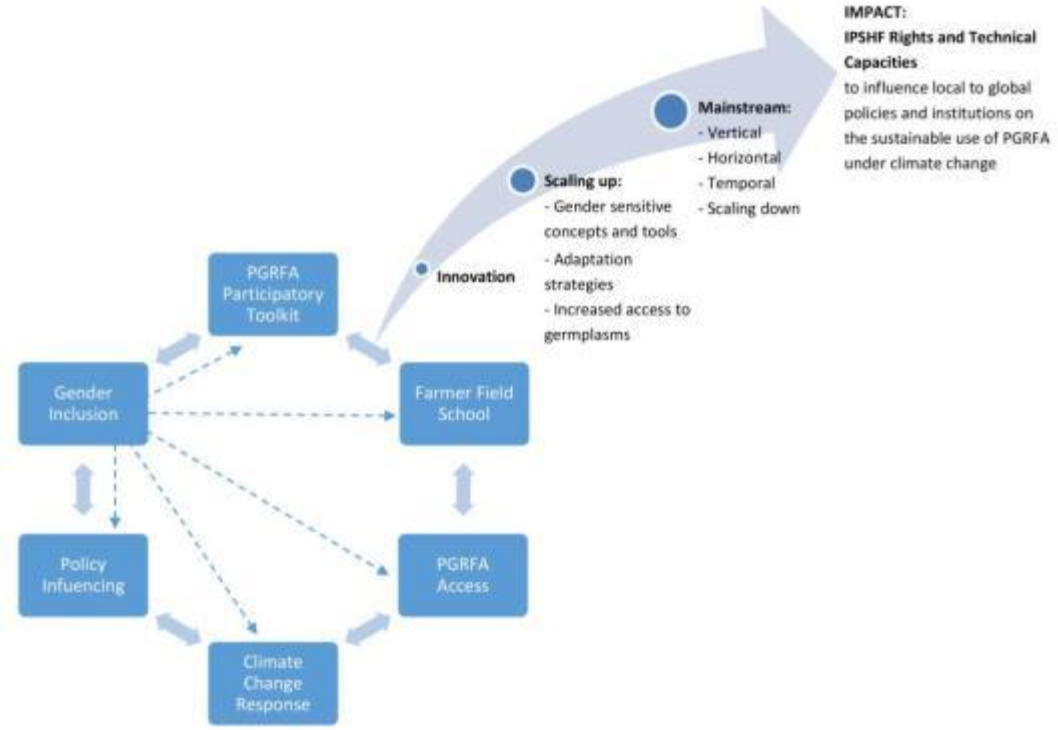

Figure 1. The Programme's Six Scaling up Pathways

91. The findings and learning from the three countries have been consolidated and further conceptualized into six scaling up pathways[39] to ensure widespread impact in such a way that social, environmental or economic conditions can be enhanced beyond the context of the Programme.

92. The Programme's six scaling up pathways are summarized in Figure 1. Each pathway represents the Programme's innovation and all pathways are closely interconnected. Exchange, linking and learning, and refinement of concepts and tools are integrated into all pathways. The six pathways contribute to key areas of achievement that are being further scaled up at the end of the three-year implementation period. The six scaling up pathways are summarized below.

93. *PGRFA Participatory Toolkit scaling up pathway*. The development of an elaborate participatory toolkit is essential for establishing a baseline to guide Programme planning. Without a properly established baseline, it will not be possible to measure progress or attribute change to Programme interventions.

[39] The IFAD scaling up concept has been adopted and defined as expanding, replicating, adapting, and sustaining successful policies, Programmes or Programmes in geographic space, and over time, to reach a greater number of rural poor (Linn 2011).

94. *Farmer Field School scaling up pathway*. This pathway focuses on the development of a self-explanatory Farmer Field School curriculum that is user friendly and can be adapted by a wide range of stakeholders within and beyond the scope of the Programme. Autonomous FFS are central to the sustainability of the Programme given the limited availability of professional experts and funding. FFS is the entry and exit strategy to move from an anecdotal to a high-impact phase in terms of Programme results, sustainability, and outreach.

95. *PGRFA Access scaling up pathway*. Facilitated access to plant genetic resources for food and agriculture is an important Farmers' Right. Often the greatest impediment to well-functioning, farmer-managed seed systems is the lack of access to a portfolio of diverse crops and varieties. Without access to diversity, investments in local plant genetic resources management are meaningless. In the case of Peru, the access pathway is closely integrated in a framework of multiple land use options and practices, to ensure equitable and sustainable land use in efforts to achieve food security. The Programme in Peru showed that the suitability of the Biocultural Heritage Territory model for replication and the potential for farmers to share knowledge and learning for mutual benefit are evidenced. The plans for scaling up in Peru include sharing and replicating the integrated landscape approach in Peru and other parts of the world; forming a network of Biocultural Heritage Territory as a Food Sovereignty Corridor in the Andean Region; and establishing a network of community seed banks.


Seed fair in Zimbabwe (photo credit Constance Chigora/Oxfam Novib)

96. *Policy Influencing scaling up pathway*. Strengthening farmer-managed seed systems requires conducive policies in order to be sustainable. Collective policy analysis and advocacy are needed to promote and mainstream the local and global importance of farmer-managed seed systems. In Zimbabwe, policy reviews were organized with farmers and the farmers union, and collaboration with all national stakeholders was sought to address issues as Farmers' Rights and seed laws. To date, nearly 6,000 farmers were informed about Farmer's Rights, and the Right to Food through FFS, seed

fairs[40], food fairs and farmer field days. A model for scaling up in Zimbabwe is illustrated by the alliance with the Zimbabwe Farmers Union (ZFU), which is an entity that currently has a national membership of over 2.5 million smallholder farmers. Through the collaboration with ZFU, outreach on the seed-related policy issues could reach out to more than 10,000 farmers in neighboring districts is ensured.

97. *Climate Change Response scaling up pathway*. Today's food production takes place against a backdrop of climate change. Through the Programme, farmers have taken climate change into account in their decision-making. The inclusion of climate related tools enabled exchanges and comparison between farmers' perception of climate change and meteorological data that would not have taken place otherwise. Through the Programme, formalized partnership with one of the largest providers of mobile communication services in Zimbabwe, Econet Wireless was facilitated. This partnership means 450 farmers registered with "Eco-farmer" (an agricultural information service) receive up-to-date agricultural information, including weather forecasts.

98. *Gender Inclusion scaling up pathway*. Men and women play different roles in food production and seed management. To effectively improve food security, seed security, and farmers' livelihoods, it is imperative to recognize these different roles and strive for optimal, fair, and equitable division of labour, decision making, and access to PGRFA.

[40] Community seed fairs allow farmers meet to display their seeds, providing farmers with the opportunity to exchange seeds as well as knowledge and experiences on the crops they grow. It is also a valuable tool for researchers to take stock of available biodiversity in a given community, and even collect varieties to conserve in the national gene banks – thereby ensuring that if the communities lose a variety, it can be recovered. Seed fairs also celebrate, recognise and reward farmers for their valuable contribution as custodians of agro-biodiversity. Prizes, such as agricultural implements, are awarded to farmers who display the widest range of varieties, or bring rare varieties. Source: Aide-mémoire mid-term evaluation in Zimbabwe (IFAD 2013)

8 SUSTAINABILITY

99. Sustainability of the activities and scaling up are concurrently pursued, through ensuring *farmers' empowerment* and through the establishment of *alliance with major stakeholders*. This include confidence building and organization to continuously learn through FFS, demand and mobilize resources and continuous access to PGRFA, gender empowerment and the ability of smallholder farmers to articulate their demands and engage in policy reform. Their appreciation of relevance of activities and through active, structured and constructive participation processes. This is reflected through concrete commitment and/or contributions of the stakeholders in each country during the Programme's implementation which is sustained even after the Programme's completion. In sum, the Programme has successfully ensured support from relevant institutions (public research and government services) so that conditions for sustainability and continuation are in place.

100. In Peru, *long-term commitment of local stakeholders* in particular the communities was illustrated by the two municipal ordinances issued at community level, on food and seed security, and the protection and promotion of the barter market. Recognition and support to farmers as breeders was successfully pursued by presenting local cases at the global level in response to the National Institute of Agricultural Innovation (INIA)'s claims on Plant Breeders Rights. In addition, the national government is proposing an article to recognize and support farmers' heirloom varieties. ANDES is advocating for this much needed support and for the further recognition and support not only for heirloom varieties but also for newly developed farmers' varieties.

101. The *alliance between local and international stakeholders* as exemplified in Peru is considered key in achieving the Programme's objectives. A collaborative work between the Quechua farmers, *Asociación* ANDES, the International Potato Center (CIP) and with support from the IFAD-Oxfam Novib Programme, Sida and the FAO's International Treaty on Plant Genetic Resources for Food and Agriculture, has allowed 750 potato seeds from the Potato Park to be deposited in Svalbard Global Seed Vault[41] in August 2015. Building on the work of the Programme, farmers from the Potato Park learned how to pollinate their potatoes and collect seeds for storage. Some of the seeds were also used to develop new varieties to feed their communities. The deposit of seeds from the Potato Park in the seed vault reflects the combination and complementarity of *in-situ* conservation in the field and *ex-situ* preservation in international genebanks, combining centuries-old tradition with cutting edge science, to conserve plant genetic heritage for future generations in case of any pests, diseases or impacts of climate change, which may lead to the loss of important food crops.[42]

[41] A facility established 10 years ago in the permafrost far north of the Artic Circle, funded by the Global Crop Diversity Trust and the Government of Norway. The Seed Vault currently holds over 860,000 food crop seeds from all over the world, to preserve important food crops for future generations.

[42] Available at http://www.fao.org/news/story/en/item/326369/icode/

102. The Programme's relevance in Vietnam is recognized through the *financial resources and in-kind staff time* provided by the government official in the Mekong Delta to the FFS (when valued, amounts to USD 298,396 for the 2012-2015 period). This contribution includes technical assistance on capacity building of farmers, providing incentives to farmer breeders and assistance in seed certification of farmers varieties. Furthermore, the support to on-farm seed conservation and development in Vietnam (through the re-enactment of a policy circular on production management of farm households' plant varieties) implies acknowledgment of and support to farmers' initiatives in relation to PGR management.

103. The Programme's partner in Zimbabwe, CTDT, drafted a Farmers' Rights Laws jointly with the Ministry of Agriculture. This shows that the approach and advocacy work of the Programme in Zimbabwe in supporting farmers' seed systems is in the process of being adopted at the national level by the government.

104. In the three countries, FFS are considered both the entry and exit strategies for the Programme. The solid organization and structures of the FFS model in three countries were ensured through a systematized and well developed FFS curriculum and training of trainers (ToT). To date, the Programme drafted, tested and used an improved curriculum in ToT sessions in Peru, Vietnam and Zimbabwe; this curriculum will benefit FFS in other communities in for example Laos and Myanmar as part of the SD=HS Programme. As one of the knowledge products of the Programme, the FFS curriculum and ToT field guides[43] are placed online, hence could potentially reach a larger number of smallholder farmers and indigenous communities.

[43] Next to other knowledge products such as the baseline survey questionnaire and gender sensitive participatory rural appraisal

9 CONCLUSIONS AND LESSONS LEARNED

105. The following section summarizes the lessons, gaps and/or limitation and lessons learned suggested by Dr. Trygve Berg during the external evaluation. The conclusions and lessons learned below also reflect the results of the internal evaluation, wherein the Programme partners jointly assessed the achievements and impacts of the Programme during the internal evaluation.

9.2 ASSESSMENT/LESSONS

106. An assessment of the results, to date, indicates that the IFAD-Oxfam Novib Programme has successfully scaled up and mainstreamed its innovations and tools. This, in turn, has resulted in an invitation to partners to submit proposals to Sida and the Netherlands Postcode Lottery. The partners are *truly grateful to IFAD* and the other donors for having the vision in farmers 'innovation and taken great risk in supporting the scaling up, both in areas that had good results and those that need further refining. It is also fully acknowledged that the Programme owes its success to the *commitment and partnership* between Oxfam Novib, ANDES, CTDT, SEARICE and IFAD. The partners recognize the importance of continuing to work with mutual respect and trust in the next phase.

107. The Programme consists of a chain of interventions including work on crop improvement and agronomy, seed multiplication and distribution, and seed regulations and policy work. Isolated work on each of those components would arguably have had limited impact. The Programme has shown that successful work on all of this as a "package" has the potential of making significant and lasting change.

108. The Programme is implemented in three different countries under very different agro-ecological and socio-political conditions. This requires flexibility and capacity to adapt content and approaches. This adaptation given, the Programme ideas function in all of these contexts. As an illustration, while most of the involved communities are smallholder-based and semi-subsistence, also commercial high-yield farming is represented (Mekong Delta). The Programme approach seems to be relevant and effective all over.

109. The innovations and results to date shows that plant breeding is a long term process and continuous attention to the needs of smallholder farmers for climate-adapted varieties is important—as continuation is needed to help strengthening the much needed services in the communities. It is concluded that conservation through sustainable use of PGRFA need *a longer term commitment*; achievements need to be further more consolidated while scaling up models of the Programme should be applied and benefit other communities. *A next phase* of the Programme is therefore needed to sustain and mainstream the results for greater Programme's impact.

110. The sustainability of the activities and scaling up of the Programme are currently pursued through farmers' empowerment, the facilitated alliance with major stakeholders and local-to-global and global-to-local policy engagement. The Programme ensured confidence building and organization of farmers to continuously learn through FFS, as well as mobilization of resources and continuous access to PGRFA and gender empowerment to be achieved. Furthermore, the Programme measured its sustainability through the ability of smallholder farmers to articulate their demands and engage in policy reform.

111. The contributions of the Programme against the *four key indicators* (seed security, food security, policy engagement and gender inclusion) are summarized in paragraph 93 to 96 below. In terms of *seed security*; the Programme facilitated the FFS graduates to produce seeds with good quality, have access to a wider choice of varieties and PGR materials, distribute quality seeds in the communities and have seeds reserves for replanting which is more frequently needed because of climate change related weather events.

112. In terms of *food security*, the Programme's FFS have been able to facilitate the development or adaptation of varieties that meet women's preferences and needs. The Programme's results confirmed that women's roles in crop management are closely linked to their responsibility for ensuring daily household food security and stockpiling food for periods of scarcity. Hence, the inclusion of women's preferences into the criteria of selection and/or breeding objectives plays an important role in strengthening women's roles in households food and nutrition security. Additionally, through access to good seeds and use of improved agronomic practices, participating farmers have increased crop yields significantly, reduced the use of inputs and to some extent made more income from their harvest by selling seeds rather than food grains and by growing high quality varieties that fetched better price in the market. The additional income is then used to buy food especially during period of scarcity, which is observed as one of households' coping strategies. The contribution of the Programme towards food security is best illustrated by the case of the indigenous peoples in North Vietnam where people experienced period of scarcity (lack of rice) of up to 17 weeks. At the end of Programme's implementation, this period is reduced to 7 weeks and completely eliminated in some areas.

113. In terms of *policy engagement*, the Programme has reviewed the entire seed-related policy environment in the three countries, identified problems, and initiated dialogues with relevant national authorities aiming at securing legal space for farmer-based seed multiplication and distribution. The Programme has been able to take these issues to the international level in the form of contributions to the debates on how to implement Farmers' Rights.

114. In terms of *gender inclusion*, the Programme has been able to build on women's social networks to strengthen farmer-to-farmer knowledge and skills transfer. The results in the three countries reaffirmed that women play an important role in making crop-production decisions and, in particular, managing plant genetic resources, to ensure household food and nutrition security. Through the Programme, the indispensable role of women in these areas has been strengthened, and become better valued. Given the importance of women's inclusion and participation, three Programme innovations have been developed. The first example of innovation is the *inclusion of women's preferences when defining communities' breeding objectives*. The second example of innovation is *the improvement of learning methodologies and exercises on gender role awareness in the FFS curriculum*. And finally, the Programme helped empower women by strengthening their technical knowledge and increasing their self-confidence.

115. *Methodology and approaches (FFS, PGRFA toolkit) adopted in the Programme, to strengthen farmers' access to PGR:* The FFS proved to be an effective educational, advocacy, empowerment, and social transformation tool. The number of people and communities practicing and applying the skills and knowledge learned provides evidence of its effectiveness as an educational tool. The Programme showed that farmers can be plant breeders, also that they can become proficient seed producers. The Programme put farmers in control of seeds. In terms of empowerment, Programme results showed farmer-to-farmer knowledge and skills transfer, improvement in farmers' technical

capacities in farm management and plant breeding, and direct engagement of farmers with institutions and government officials. As an advocacy tool, the FFS helped obtain concrete policy actions by local and national government levels. As a social transformation tool, it contributed to improved food and seed security for communities, in particular to farmers' control over seed security. The Programme proved that farmers can take the lead in setting breeding objectives and making plans (see the farmer presentation at CTU). It provided the evidence necessary to influence policies and Programmes to integrate the needs and innovations of farmers. The FFS elevated farmers' level of awareness in agricultural production, from farming for consumption or selling purposes, to farming to adapt to climate change and contribute to improving communities' food and seed security.

116. The Programme's PPB interventions are seen as a successful innovation. The Programme has proven to the scientific community that it can work at both farmer and IP community level and thus has opened up an area where the scientific community, farmers, and indigenous peoples can work closely together. Further, the Programme could demonstrate that local/traditional knowledge and scientific knowledge can be used side by side, not only in plant breeding but also in meteorology (e.g., weather forecasting). The Programme has provided new insights into which participatory breeding approaches are more feasible for farmers, and which are more demanding; also into how the seed production of farmers' varieties and other varieties can be organised effectively at local level. Farmers can better afford PVS (comparison between stable lines), PVE (adaptation of segregating populations to local circumstances), rehabilitation of preferred farmers' varieties (selection of better yields and shorter duration) and can less afford more demanding forms of PPB (performing crosses and subsequent lengthy selection). If the latter is chosen it is normally for reasons of control (selection of parents by farmers). In all cases, coalitions with the public sector are essential, since farmers could not sustain all the necessary activities themselves, especially with fast changing climate and market pressures.

117. Curricula and field guides for the FFS are evolving documents that are continuously revised according to experiences. This Programme has come a long way on this. While those Programme outputs can serve as models in new areas, they need to be adapted to local environments and local production systems everywhere. This requires involvement of technical experts, understanding of the policy context, and a solid command of the pedagogy and ethics of the FFS-education. Knowledge management and public outreach form major challenges for a successful autonomous diffusion of the FFS approach.

118. The improved agronomic practices are introduced using the FFS approach; through experiments and observations in the field. Farmers switched to the new ways because they understood and were convinced. The combination of good seeds and good agronomy proved to be powerful.

119. Participatory Plant Breeding exposes diverse segregating crop populations to actual current growing conditions in farmers' fields. Growing conditions include all of the direct and indirect climate change effects. Thus such breeding, when established as a continuing activity ensures selection of materials that respond relatively better to the new conditions. This tends to result in steady replacement of varieties with new "climate-updated" selections. Such local selection has a comparative advantage since impacts of Climate Change is highly localized and interact with other aspects of the cropping systems.

120. In Vietnam, the Programme has been able to go beyond the common notion that PPB is an alternative only in marginal areas, where the seed industry is absent. The Programme's effort to link FFS plant breeding activities with seed multiplication and distribution, through established seed

clubs (e.g., in the Mekong Delta) proved to be a very *successful model for scaling up*. In terms of impact and sustainability, this model enabled autonomous activities to take place, from pre-breeding (by public institutions, i.e. through FCRI), to farmers' testing (FFS activities carried out by farmers), and to multiplication and marketing of seeds (by farmers). In the Mekong Delta, around 400 seed clubs were established through the FFS-PPB activities of past work of partners in Vietnam. These seed clubs are acknowledged by the local government as important seed-suppliers; providing 30 percent of the total seed requirement in the Mekong Delta in 2014 as compared to 17 percent supplied by seed companies in the same year. This shows that FFS-PPB is not only *effective* in small-scale and marginal *(low potential) farming areas*, but also has merits and potentials in *high-yield commercial farming* (high potential areas).

121. Hence, the Programme shows that seed production and distribution, if linked to PPB, have more impact. Local seed production can influence diversification across a greater geographical area; by expanding the types of variety being used in farming systems. In addition, the contributions to local economies become more significant.

122. During Programme implementation, much attention was paid to changing realities which, in addition to posing new threats, are also offering opportunities to local farmers. They are redefining their crop priorities and the preferred characteristics of their cultivars, so the Programme continues to assist them with the conservation and development of crop diversity for the present, and prepare them to continue their PGR work for the future.

123. The Programme has been able to forge new, effective coalitions (from local to global), at an unanticipated scale, in each of the Programme countries. The Programme's success is determined, to a large extent, by the partners' ability to involve public sector institutes (e.g., breeding institutes, universities, extension services) and to acquire complementary support from local government for Programme operations, hence contributing to the sustainability and scaling up of the Programme. These public sector institutions have contributed with genetic resources, (pre-) breeding materials and knowledge. The experience in the Programme seems to suggest that this alliance is effective in terms of development work, and promising in terms of sustainability because of the association of organized farmers with permanent public institutions. It would have been impossible to scale up without the partnerships with the research organizations that have provided not only technical support, but also infrastructure and local resources. For the next phase, the Programme should better acknowledge the contribution of the national partners to the Programme, e.g., the financial contribution provided by the government in the Mekong Delta, in Vietnam.

124. The Programme proved to have a local to global outreach. This includes partnerships with academic institutions, research institutions, civil society organisations, IPSHF communities, and national and local government institutions. It is evident from the Programme that FFS in PGR management are no longer an isolated affair, belonging to small farmers and CSOs; they have gained by recognition and support from all relevant stakeholders.

125. Based on these lessons, the next phase of the Programme should include as an objective 'to influence the research priorities and approaches of formal plant breeding'.

126. The Programme has been able to improve its approaches, methodologies and tools. However, communications is also very important and is still considered to be the Programme's

weakness. It is agreed that all FFS curricula and field guides will be prepared for publication at the global level, and that they might be accompanied by an online document that addresses more general aspects, e.g., the social-cultural context of FFS and their role in poverty alleviation, empowerment, experiential learning, and food security objectives. The country-specific curricula and field guides should be self-explanatory and contain all necessary information. Further editing should be done at the Programme level, and everything should be ready for the final report of the IFAD Programme.

127. *Knowledge management.* Although it is acknowledged that the Programme has strengthened farmers' seed systems, this will continue to be the main focus in the next phase. It is anticipated that a better-developed knowledge management system will address some of the challenges and improve the sharing of traditional knowledge, gender and social inclusion aspects and advocacy for better and more appropriate policies.

128. Knowledge management should include chapters for internal and external use; the external elements are also relevant for accountability and transparency. Based on current practices, the partners have agreed that, in all publications, authorship of the Programme's work will be assigned to the participating organisations.

129. *Policy engagement.* The Programme has been able to move policy advocacy from local, to national, to the global level. The next phase should address the sub-regional level (ARIPO[44], COMESA[45], SADC[46], ASEAN[47]) since decisions (e.g., on plant breeders' rights) are taken at that level, and the Programme currently has no access to this sub-regional level. In addition, the Programme can demonstrate that the gap between the Distinctness Uniformity and Stability (DUS)/Value for Cultivation and Use (VCU) systems, incorporated in seed laws, and the technical and financial capacities of smallholder farmers is still very prominent. The Programme should base its policy advocacy on local experiences with farmer seed production in addressing this issue. On policy engagement, the Programme has offered an alternative policy model, through the 'local certification' mechanism, allowing farmers to produce and sell unregistered varieties.

130. The Programme has directly and indirectly attributed to poverty reduction; this is evident in the way farmers actively articulate their needs to local governments, and in the role the farmers play in producing seeds in the Mekong Delta, thereby meeting a major share of seed demands in the region. However, the Programme needs to make a more visible contribution to poverty reduction, especially since many global, international agreements, e.g., The 'International Treaty', place great emphasis on food security's contribution to poverty alleviation.

131. The Programme inputs are knowledge, skills and genetic resources. When used, such inputs tend to take roots and also "move" by diffusion. Sustainability and continuation are likely when farmers are also organised, and linked to and supported by permanent public institutions. The comprehensive nature of the Programme adds up to a model of agricultural development. This model works effectively in small-scale and marginal farming areas, but according to convincing Programme results in the Mekong Delta, it also has merits and potentials in high-yield commercial farming.

[44] African Regional Intellectual Property Organization

[45] Common Market for Eastern and Southern Africa

[46] Southern African Development Community

[47] Association of Southeast Asian Nations

9.3 GAPS

130. The scaling up of PGRFA conservation, management and use for food security requires a longer-term engagement. The three-year Programme while proved to be successful, observed some limitations and gaps that would need to be addressed in the next phase.

131. *Methodology, tools, and knowledge management.* Continuous improvement and extension of the FFS curricula and field guides is needed and should be based on feedback received from activities carried out during field school sessions.

132. One challenge (and it will continue to be a major challenge), is to have an efficient and systematic approach; and the appropriate methods and tools to incorporate traditional knowledge and local cultures and beliefs into the FFS PPB curriculum and field guide. This will involve the use of local languages and visual aids, and developing field guides with symbols, thereby enabling the Programme to package results in a user friendly narrative.

133. Another major challenge is to meet the need for a stronger component on gender concerns in the FFS PPB curriculum and Field Guide and to allow more systematic organization, collection and analysis of data, in order to capture the preferences of women, weaker members of the community, the young and the old. The curriculum should also include topics that address farmers' ability to organise, and participate in policy discussions, to lead debates, and to have the required facilitation skills to request resources. Climate change, in particular adaptation strategies, have also been identified as an area for further improvement.

134. The IFAD-Oxfam Novib Programme will contribute significantly to discussions on conservation, believing that the aim should be to conserve a dynamic system that is able to effectively manage the diversity of genes or broad genetic base of crops, not specific phenotypes.

135. The next phase of the Programme should make an effort to submit scientific and technical papers, the lifeblood of research institutions and a powerful tool to influence policy makers and the scientific community.

136. The partners acknowledge that the dual function of publications (internal for learning and external to present knowledge and results) tends to be underestimated.

137. Biocultural protocols related to genetic resources management and the FFS curriculum should be strengthened in the next phase. PPB should be linked directly to the market, the impact of climate change, and cultural, spiritual values.

138. *Policy engagement.* Policy gains have primarily been achieved at the local level; few at national level. Policy gains should reach regional and global levels and should ensure farmer participation in decision-making. Regional seed policies will be very important in the future development of political and economic blocks (COMESA, ARIPO, SADC, ASEAN). The Programme's presence and advocacy has not yet focused on these forums. Programme engagement in regional debates in the next phase will be part of the further scaling up and mainstreaming of Programme objectives.

139. *Gender inclusion.* The gender and social inclusion aspect of Programme implementation needs further improvement in terms of ensuring women's participation in interventions and the inclusion of gender aspect in policy development. This should be undertaken also in a cultural context, where women's participation is not fully addressed. In terms of policy engagement, it is important to engender the discussion of Farmers' Rights

140. *Partnerships between farmers and the public sector.* Partnerships with research and breeding institutes should be sustained; so too should cooperation with universities and local governments. It will be essential, for the scaling up and sustainability of the Programme, to train more extension officers. It is also noted that engagements and partnerships with research institutions should be more structurally addressed.

10 RECOMMENDATIONS

141. The following section summarizes the recommendations suggested during the internal evaluation of the Programme partners and the external evaluation led by Dr. Trygve Berg.

142. Subsequent initiatives should further scale up the six areas of innovations as summarized by the six scaling up pathways. The key pathways herewith include (1) introducing the baseline survey, (2) organizing farmer field schools, (3) providing access to plant genetic resources, (4) tapping into technical support from scientific institutions while ensuring exchange and comparison with local knowledge from the communities, (5) anticipating and adapting to climate change, and (6) enabling local to global and global to local policy engagement. These efforts should ensure a continued scaling up of farmer-led plant breeding and seed production rooted in an increased collaboration with research and breeding organizations and local authorities. The Programme's way of ensuring gender inclusion and relevance for indigenous peoples and otherwise marginalized people should be given due attention in future work.

143. The FFS-curriculum should be considered as a living document. Free access of these knowledge products for all stakeholders mainly through the SD=HS' website allows the Programme to solicit necessary feedback and suggestions for further improvement. One key aspect for improvement is the incorporation traditional knowledge and local cultures into a user-friendly FFS PPB curriculum and field guide (tailored to particular crops and agro-ecologies). Editing and further innovative work on how to present issues in an easy-to-understand, user-friendly way. Curriculum and PPB activities should be further developed in response to particular needs under climate change. The experiences with the current drought in Zimbabwe, also represent a plea for the farmers' disaster assessment and contingency plans.

144. The Programme was able to introduce the Programme's approach and innovations into new areas in the second year of implementation through the SD=HS Programme. Having demonstrated that the Programme's approach and innovation could be adapted to different agro-ecological and socio-economic conditions, it could now be recommended for expansion to other communities.

145. With the advances made in the current Programme, mainstreaming appeared a realistic possibility. This, in turn requires further policy-work towards formalization and of collaborative activities with the public sector implementation through ministerial work plans, as well as continued engagement in on-going debates regarding the revision of seed laws and plant variety protection laws nationally and internationally, and continued work to gain institutionalized recognition in public research and education.

146. Mainstreaming also requires more attention to publishing. Results and experiences should be written up for scientific and popular journals as well as in formats that can be used in farming

communities and in other dedicated forums. This should continue to be part of future Programme's planning and it may require new approaches, new tools and a greater involvement of the educational sector.

147. With regards to target groups, work on gender and social inclusion should be improved in the next phase. This may require selection of new and additional crops that are under women's management, such as vegetables, or in particular relevant to the poor, such as neglected and underutilized species. The new Programme phase should find ways to involve the youth or other groups in the food diversity agenda, and offer them the perspective of a better livelihood. As an illustration, the Programme may want to explore the possibility to form FFS for the youth.

148. The Programme should expand its policy focus and engage in policy debates at the sub-regional level, i.e. COMESA, ARIPO, SADC, ASEAN. It is important to continuously engage farmers in relevant policy venues and include gender issues.

149. The next phase may explore the formation of a multi-stakeholder technical platform where discussions between farmers and scientific communities can be effectively accommodated.

150. As recommended in the supervision mission of the Grants Portfolio Adviser of IFAD[48] the global-to-local and local-to-global dimensions of this Programme are of particular interest as a scaling up model for IFAD to consider in other grant Programmes, as it basically helps develops global public goods on the one hand, and on the other hand brings global public goods to life, by operationalizing them in local contexts. Indeed, the Programme is conceived to develop and bring together a critical mass of multiple stakeholders to influence policy reforms from local to national and international levels. At the same time, international policies will be "brought down" to local contexts for smallholder farmers' own understanding, valorization and operationalization. The benefits are at all levels: at the global level, the major benefits include evidence for model building and clear recommendations for development practitioners working on Right to Food, Farmers' Rights and biodiversity, including for example development partners involved in the projects of the Benefit Sharing Fund of the International Treaty on Plant Genetic Resources for Food and Agriculture, Commission on Genetic Resources for Food and Agriculture of the FAO, the Committee on Food Security and the Convention on Biological Diversity. At the local levels, the benefits accrue to smallholder farmers- and indigenous communities as they are better able to analyze and validate global policy narratives.

151. The Programme showed that for centuries, farmers have used complex adaptation strategies to manage their seeds and developed criteria for seed selection with the aim to help manage risks such as climate variability and pests and diseases. The dynamics of how farmers adjust and develop new knowledge to adapt to climate change needs to be understood, used to complement scientific knowledge, and integrated into broader development processes.
The Programme therefore recommended future support of FFS initiatives that aim at understanding farmers' dynamics in adapting to climate change as well as to promote mainstreaming of the FFS approach as one of the key tools in PGR management. The Programme also recommends that integration of traditional knowledge, in particular contributed by women, is indispensable in biodiversity management for climate change adaptation. A future Programme hence should focus on women and indigenous peoples and promote a better understanding on the use of and the complementarities between traditional and scientific knowledge.

[48] Aide-mémoire mid-term evaluation in Zimbabwe (IFAD 2013)

152. IFAD's active support was a source of innovation in the Programme design and implementation. The constructive engagement of IFAD has enabled the Programme to further scale up.

ANNEX 1. PROGRAMME LOGFRAME

Annex 1. Results-based logical framework

	Objectives-hierarchy	Objectively verifiable indicators	Means of verification	Assumptions
Goal	The goal is to uphold, strengthen and mainstream the rights and technical capacities of indigenous peoples and smallholder farmers (IPSHF) in order to influence local to global policies and institutions on the sustainable use of plant genetic resources (PGR) for food security under conditions of climate change (CC).	· 82,300 households serviced, of which: · at least 60 percent women; · at least 50 percent households use improved seeds; · 50 percent households w/ improved food security; · Recognition of f IPSHF' role in national and global governance of food systems.	· Base line data, progress and evaluation reports; · Report on Farmers' Rights (FR) models reflected in The Treaty's resolution; · Local or national food insecurity reports.	
Objectives	1. Develop locally appropriate adaptation strategies for food security by bridging traditional knowledge and science on PGR and incorporating local perceptions on climate change; 2. Empower IPSHF to influence local, national, regional and international food, agriculture and climate change policies toward realising the Right to Food (RtF); 3. Strengthen the adaptive capacities of IPSHF in PGR conservation, access and sustainable use, by scaling up successful and/or innovative models.	· Adaptation strategies for food security developed and tested by IPSHF w/ support from scientists; · No. of potentially climate resilient PGR tested in IPSFH fields; · No. of policy dialogues involving IPSHF; 3 IPSHF priorities elevated to discussions of policy makers at local, national, regional and international levels; resources directly leveraged by the IPSHF. · No. of IPSHF trained in PGR management for climate change adaptation; Percentage of communities reached; Scaling up models (3 levels: PGR, farm and ecosystems and at horizontal, vertical ,etc) piloted and adapted.	· Baseline data, progress and evaluation and peer review reports; · Case studies, evaluation. process documentation; budget, Submission to e.g. ITPGRFA; National and global policy briefs; learning notes. · Programme and evaluation reports; peer review, process documentation of scaling up process.	Potential factors that can affect achievement of objectives include: · Extreme climatic events; · Lack of political will amongst governments, multilateral systems and private sector to tackle Climate change and food crises; · Aggressive promotion of monopolistic Intellectual Property Rights; · Seed exchanges and seed flow not legally obstructed by seed rules and regulations.
Outputs	**Objective 1** · Climate Change analysis and its affect on IPSHF farming integrating local perception	· 3 in depth case studies comparing people's climate change analysis w/ climate data and how this affects their PGRFA	· Semi structured interviews w/ communities, esp. women; · Case studies, baseline survey, progress and evaluation re-	· Conducive policy and legal frameworks for gender justice, indigenous peoples's rights, Farmers Rights and sustainable agriculture *are* discussed

	w/ scientific climate data, including women's perceptions; · Tested farming practices and potential climate resilient seeds; · Gender sensitive tool for capturing people's climate change perception. **Objective 2** · Gender sensitive learning modules on sustainable PGRFA management and empowerment approaches; · Established Farmer Field Schools (FFS) or community organizations for policy analysis and engagement; · Local, national and global policy briefs, including gender approaches to FR and RtF. **Objective 3** · Gender sensitive concept and tools for scaling up PGRFA for food security; · Publications of models for scaling up; · Policy makers awareness of scale up models.	management for food production; · Percentage of IPSHF testing farming practices adapted for climate change; · No. of potentially climate resilient seeds identified by farmers; · Percentage of women's feedback on the outputs; · Power and gender analysis integrated in Programme's policy analysis; · 40-50 percent of FFS organized to confidently engage in policy analysis and dialogues at community levels, 20-40 percent at national levels and 5-10 percent at global levels; · Policy analysis of Programme reflected in global policy such as the ITPGRFA; · Increased reference to women's role in FR and RtF.FFS and communities' assessments of the concept and tools; · Peer reviews of the concept and tools; · Evaluation of scale up models; · Policy makers participation in dialogues.	ports, including gender disaggregated data; · Knowledge Management (KM) learning Notes · Progress and evaluation reports; case studies; Resolutions and ordinances; implementing regulations of seed laws; Technical publications; local government development plans and budget; KM learning notes; · Progress and evaluation reports, peer review reports from gender expert; FFS reports; press release; KM learning notes.	within relevant climate change and agriculture international processes such as UNFCCC, CBD, ITPGRFA; · Most countries adopt and implement the United Nations Declaration on the Rights of Indigenous peoples (UNDRIP).
Key Activities	1.a.Inception period (fine tuning/gender sensitizing of tools and work plan, review survey results); 1.b. Joint scientific and IPSHF assessment of climate change trends and traditional PGR coping strategies for food security; 1.c. Participatory selection and piloting of innovative PGR adaptation strategy integrating traditional and scientific knowledge;	· Most stakeholders committed to implementing Programmes; gender sensitive tools tested and refined; · Methodologies developed for participatory assessment, 3 country assessment produced; · Assessment and modifications to piloted innovative strategies based on on-ground experiences pilots of innovative strategies;	· Minutes of partners and stakeholders meetings; reports from participatory assessments, documentation on pilots w/ feedback from women; · Minutes of meetings and workshops; decisions, recommendations and plans; documentation of gender issues included in discussions; training reports; documents of submis-	· All relevant stakeholders have been included in discussions and planning; stakeholder representatives have adequate clout to enforce/ implement work plans; adequate continuity within the stakeholder institutions; · Reviews have been comprehensive and multi-disciplinary; staff commitment and capacity for gender mainstreaming are consistent;

	2.a.Participatory analysis on policy gaps and training needs analysis using gender lens; 2.b. Learning module developed for capacity development for farmer advocates w/in FFS; 2.c.Local and global policy reflections and engagement (ordinances, mobilizations, submissions to international bodies);including participatory development of fact sheets and policy narratives; 3.a.Technical capacity building of IPSHF for management of PGR at different scales (genetic, farm and landscape); 3.b.Development and piloting of pathways for scaling up PGR conservation, access and sustainable use in the 3 countries, including barter trade and market access; 3.c. Development of biocultural protocol.	· Identified priority areas / focus of policy advocacy (policy agenda); · No. farmer advocates/ farmer groups trained and actively engaged in policy advocacy; No. **o**f policy forums conducted, policy recommendations/ position papers drafted and submitted/ presented to international bodies; · No. of IPSHF men and women trained and practicing PGR management; · Refined strategies and lessons learned for scaling up; Increased availability of IPHSF produce at market and/or barter; · Biocultural protocol discussed and adopted by the partners and ready for sharing and higher level discussions.	sion/ communications to international bodies; · Training, monitoring reports, FFS feedback; · Minutes of meetings, case studies, documentation process, baseline survey; · Protocol document, minutes of meetings, progress report.	· Advocates have commitment to sustain advocacy activities, and are able to engage appropriate agencies, individuals, stakeholders in policy discussions; · There is adequate commitment among research institutions and CSOs to carry out and sustain pro-poor policy advocacy and development; · Stakeholders are committed to implement and sustain plans for scaling up; · Access to market creates incentive for farmers to conserve and use indigenous PGR; · Demand for local crop varieties and local market systems are susceptible to influence and change.

ANNEX 2. LEARNING NOTES

1. Learning note from Vietnam

Title:

Farmer Field School's experiences as effective evidence-based local to national policy influencing on seed laws in Vietnam

(A case study from a three year IFAD-Oxfam Novib Programme "Putting lessons into practice: Scaling up people's biodiversity management for food security)

Region/country:

Vietnam

Contact information:

- Malu Ndavi, Senior Programme Officer, IFAD
- Rima Alcadi, Grants Portfolio Adviser, IFAD

Date: 20 June 2016

Primary subject area: Farmer Field School, empowerment, access to plant genetic resources.

Description of issue and context

The IFAD-Oxfam-Novib Programme[49] implementation in Vietnam is a collaborative effort of SEARICE, SRD, the Field Crop Research Institute (FCRI) and the Plant Protection Department (PPD).

In Vietnam, the Programme has been implemented in communities of ethnic minorities and smallholder farmers, where both food insecurity and climate change related events are experienced. The *primary target beneficiaries*[50] initially included 6,720 households in four villages, in four communes, in four provinces in the upland area to the northwest and northeast of Hanoi, and in the north central region of Vietnam; namely Hoa Binh, Son La, Yen Bai and Thanh Hoa provinces, which are the poorest regions of Vietnam. Of these farming households, 20% are from the following ethnic groups: Nung, Tay, Cao Lan, Muong, and Thai in the North. The *direct beneficiaries* include the poorest farming communities in the Mekong Delta region, totalling an outreach of 75,000 households. In addition, in these communities, farmers primarily access seeds through purchase; the farming systems are dominated by hybrid varieties and traditional varieties are slowly being lost.

All four provinces are hilly or mountainous terrains, ranging from 200 meters above sea level (masl) up to as high as 1,050 masl in Son La province. The mountainous areas are interspersed with either plateaus or plains. Thanh Hoa has moderate elevation; mostly hilly, with plains and coastal areas making up 75% of its total area. Farms are generally sloped, because of the mountainous terrain in Hoa Binh, Son La, and Yen Bai; the exception is Thanh Hoa and some plains of Yen Bai, which have relatively flat farms.

[49] "Putting Lessons into Practice: Scaling up People's Biodiversity Management for Food Security"

[50] Primary target households are households located in the geographic areas where most *Programme* activities took place.

Prior to the IFAD-Oxfam Novib Programme, the farming systems in North Vietnam were dominated by high yield varieties (HYVs) and hybrids, since agricultural production was focused mainly on yield. The issue of dominance of commercial rice production has resulted in much loss of diversity in the rice fields of Vietnam. Dependence on a narrow range of varieties, along with increased risk of disease (as the varieties eventually deteriorate), could make rice production vulnerable. Through the Programme's FFS, climate change events were observed as an important factor in defining farmers' breeding objectives; this is evident in the varieties they decided to select, either for seed production or utilization as parent materials in cross breeding activities.

Lessons learned:

After three-year implementation, the Programme has directly benefited 6,750 households within the 21 communities, and has the potential to reach thousand more, indirectly through advocacy-related activities and interventions.

The Programme's implementation in Vietnam generated lessons that can be used as a springboard to the next phase, enabling Programme continuity and sustainability, as well as providing models for similar interventions.

In summary, the lessons learned are:

1. Multi-stakeholder, participatory Programme approaches, creating innovative coalitions, greatly contributed to achieving targets and objectives. The involvement of local and provincial authorities provided for interventions, making use of local information and support and fine-tuned to local circumstances.
2. Involvement of local and provincial authorities made it easier for farmers to access services provided by the different public institutions and organisations.
3. Regular interaction between technical staff and farmers translated into effective mutual knowledge and skills transfers, as evidenced by the results of farmers' on-farm field studies and the application of selection, breeding, and crop management techniques. (Continuous capacity development of technical staff makes them more effective facilitators during training sessions).
4. More importantly, farmers' involvement in the Programme further proved that they are key actors in rural development and in addressing issues as complex as climate change, food security, and seed security.
5. The Programme's FFS methodology (the use of FFS curricula and FFS/PPB field guides in FFS classes) proved to be effective in accomplishing the dual objectives: building technical capacities and building self-confidence (empowerment). This methodology should be scaled up for wider adoption and use outside of the Programme, and worldwide. More importantly, it should be continuously refined and adapted to local circumstances. (Therefore, the Programme will continue to refine the FFS curriculum and field guides beyond its three-year implementation phase, through incorporation into the SD=HS Programme.) Likewise, the Programme's PGRFA Participatory Toolkit, consisting of baseline/endline survey tools and participatory rural appraisal tools has been able to provide farmers with insights into their own livelihoods, especially concerning past, present, and future changes in their seed and food security, in cropping patterns, and in farming practices. The toolkit is also a living document, and in the future will be adapted continuously as it aims to help farmers set their community plans and to better understand their decisions (and consequences), to exclude some crops and varieties from farming system to the benefit of others.
6. Women farmers, especially in the indigenous communities, showed keen interest in, and very good aptitude for, learning and applying technical skills in FFS and PPB. Women's participation needs to be pro-actively encouraged and solicited.

Strategy (ies) used

One of the key innovations of the Programme in Vietnam is the alliance with local stakeholders, in particular the relevant government offices (Field Crop Research Institute/FCRI); through which increased access to PGR diversity for the farmers[51] has been obtained. Furthermore, the Programme is implemented in close collaboration with MARD at district and provincial levels, including with the involved units within MARD, such as Plant Protection Sub-Department (PPSD). The involvement of PPSD is considered effective given that they have a long standing experience with the implementation of FFS classes for Integrated Pest Management (IPM). From the government point of view, the Programme is considered *relevant* and has *contributed to the common overall objectives* i.e. on poverty reduction, food security and climate change adaptation.

As an illustration of the effective collaborations with public sector is the development of *improved FFS-PPB Field Guide for rice* that was prepared jointly by SEARICE, SRD, FCRI, PPSD and rice farmers in North Vietnam. The improvements focused on: a) the efficient use of participatory tools in assessing the seed system situation and in setting up breeding objectives; b) a detailed guide on hybridization and management of F1 seeds; c) a detailed guide on different selection techniques. It is very important to address selection, to ensure successful implementation of PPB activity. The FFS-PPB activities that were conducted provided opportunities for communities to generate knowledge and develop skills on: line selection, varietal selection, rehabilitation techniques, cross breeding, and other related concepts and methodologies, normally confined to the scientific community. Additionally, inputs on the principles of the System of Rice Intensification (SRI) method, in the FFS-PPB, and its subsequent applications, together with the other technical skills led to positive outcomes, such as the reduction in fertilizer use, seed requirement and pesticide application. This, in turn, resulted in improved farm productivity and income, allowing food and seed requirements to be addressed.

Results

Through the FFS in Son La province of North Vietnam, F4 rice breeding lines (bulk selected) were provided to the FFS communities. After four seasons of selection, a rice plot, cultivated with one line of F8 was found to be the *best performing* in the commune during the El Niño drought of the 2015 winter-spring season. This has contributed to a broader genetic base of rice on-farm and to a local seed system that is more climate resilient.

The Programme is highly relevant in Vietnam, especially since that country has intensively farmed areas, dominated by commercial farming. Many stakeholders recognise the Programme's role and contributions, illustrated by the financial support and staff time provided by government officials in the Mekong Delta (worth USD 229,000 in monetary terms). This clearly shows the local governments' sense of ownership of the Programme, *Strengthening Farmer-Agricultural Research and Extension System Partnership (*FARES) in the Mekong Delta. Moreover, FFS areas and farmers' on-farm

[51] Which is one of the six scaling up pathway of the Programme. The Programme's six scaling up pathways are: PGRFA Participatory Toolkit; Farmer Field School (FFS); PGRFA Access; Climate Change Response; Policy Influencing; Gender Inclusion.

research areas are being used by extension services as models. Similar support is expected in the Programme areas in North Vietnam, considering both local governments and communities acknowledge the need to continue implementing the Programme activities.

Another concrete example of support for, and acknowledgement of, the Programme—and a significant achievement in terms of policy engagement—is local governments' *provincial and district level "certification"* that allows farmers to produce and sell unregistered varieties at village, district, and even provincial levels. Policy engagement work within the Programme, to formalise "registration" under government institutions provides alternative yet very powerful mechanisms to support local PGR management.

In Vietnam the Programme has been able to go beyond the common notion that PPB is an alternative only in marginal areas, where the seed industry is absent. The Programme's effort to link FFS plant breeding activities with seed multiplication and distribution, through *established seed clubs* (e.g., in the Mekong Delta) proved to be a very *successful model for scaling up.* In terms of impact and sustainability, this model enabled autonomous activities to take place, from pre-breeding (by public institutions, i.e. through FCRI), to farmers' testing (FFS activities carried out by farmers), and to multiplication and marketing of seeds (by farmers).

Recommended practice

At the heart of the Programme is empowerment, which is embedded in the FFS approach. The Programme in Vietnam shows that FFS becomes more effective when all key stakeholders; in particular the primary beneficiaries of the Programme (small scale farmers) and the public sector, *collaborate* to achieve the Programme's objectives. To enable the facilitated collaboration, in-depth analysis in particular of farmers' needs and challenges, which is embedded in the FFS approach, is prerequisite. The identification of FCRI as one of the key stakeholders is considered strategic since the partnership allowed increased access for farmers to PGR diversity to realize higher yields and novel diversity. Stakeholder analysis, as part of the Plant Genetic Resources for Food and Agriculture (PGRFA) Participatory Toolkit[52], at the onset of the implementation informed the Programme to engage strategically with institution that could contribute in achieving the Programme's objectives. On the other hand, the Programme in Vietnam also shows that one of the key strategies for successful implementation is, to ensure relevance of the Programme to government objectives and/or *supportive local policy framework* since the local governments have the *mandate to sustain and mainstream* the Programme, i.e. to another communities.

Application

This recommended practice has been scaled up and applied in the Sowing Diversity=Harvesting Security (SD=HS) Programme, in particular under pillar 1 (Scaling up models).

Implications for IFAD's operations and policies

The IFAD strategic framework 2016-2025[53] noted that a key element of IFAD's approach is to build capacity of grass roots institutions and organisations. In this context, the FFS approach of the

[52] One of the six scaling up pathways

[53] IFAD. 2016. IFAD Strategic Framework 2016-2025. Enabling inclusive and sustainable rural transformation. ISBN 978-92-9072-651-7. Rome: 2016.

Programme that aims for empowerment is in line with the approach of IFAD. Next to that, the strategic framework also referred to partnership between governments, the private sector and small-scale rural producers as one key components of IFAD's engagement.
The lesson from the Programme in Vietnam showed that FFS have been effective, not only in achieving the empowerment objective, but also in *facilitating positive engagement* between governments and small-scale farmers.
The dynamics of how farmers adjust and develop new knowledge to adapt to climate change needs to be understood and integrated into broader development processes.
The Programme therefore recommended future support towards FFS initiatives that aimed at understanding farmers' dynamics in adapting to climate change as well as to promote the mainstreaming of the FFS approach as one of the key tools in PGR management contributing to the broader IFAD's development objective[54].

Scaling up

The IFAD-Oxfam Novib's Programme has been scaled up into the SD=HS Programme funded by Sida; through which the six scaling up pathways developed during the three year Programme's implementation are currently being applied and further refined.

Conclusions and recommendations

The issue of dominance of commercial rice production in Vietnam, has resulted in much loss of diversity in the rice fields. Dependence on a narrow range of varieties along with increased risk of disease since the varieties eventually deteriorate could make rice production vulnerable. The Programme's FFS has allowed the farmers to analyze this challenge, which allowed them to access services provided by the different public institutions. This innovative coalition with FCRI and the local and provincial authorities has in turn resulted in the provision of F4 rice breeding lines which were then selected for four seasons. The farmers' selection was found to be the best performing in the commune during the El Niño drought of the 2015 winter-spring season. This has contributed to a broader genetic base of rice on-farm and to a local seed system that is more climate resilient. The use of FFS curricula and FFS-PPB field guides in FFS classes should be scaled up for wider adoption and use and for further refinement beyond the Programme, and worldwide. At the moment the FFS method is being applied in the SD=HS Programme by the consortium of partners (Oxfam Novib, ANDES, CTDT and SEARICE) which allow as well for further refinement of the tools.

Collaborators
SEARICE: Programme's partner in Vietnam together with the Centre for Sustainable Rural Development (SRD), the Field Crop Research Institute (FCRI) and the Plant Protection Department (PPD).
ANDES and CTDT: Programme's partner in Peru and Zimbabwe respectively.
IFAD and Oxfam Novib: financial support and technical backstopping. Oxfam Novib provides as well the coordination of the global component of the Programme and overall management of the Programme implementation.

[54] FAD's strategic objective that contributes to the Agenda 2020 is to enable rural people living in poverty to improve their food security and nutrition, raise their incomes and strengthen their resilience

Links and resources
Oxfam Novib, ANDES, CTDT, SEARICE, CGN-WUR (2015). Internal Evaluation Report. 3-9 September 2015. Vietnam. The Hague: Oxfam Novib.

2. Learning note from Zimbabwe

Title: Evidence base local to national policy engagement in Zimbabwe
Region/country: Zimbabwe
Contact information:

- Malu Ndavi, Senior Programme Officer, IFAD
- Rima Alcadi, Grants Portfolio Adviser, IFAD

Date: 20 June 2016
Primary subject area: Farmer's Rights, seed laws

Description of issue and context:

The Zimbabwean agricultural system and legal frameworks had been developed with significant contributions from the corporate seed sector. While smallholder farmers have been collecting, selecting, crossing, testing, multiplying and storing their seed for centuries, the role and importance of farmers' seed system seems not to be recognized. The growing of local farmer varieties, which are locally adapted and potentially more resilient in climate change context, were therefore being discouraged hence the levels of crop diversity were becoming narrower, especially in agro-ecological regions suitable for maize growing.
Another challenge identified during the three-year implementation is that awareness on seed laws and Farmers' Rights was relatively low amongst the local stakeholders. While it is recognized that seed laws in particular tend to interfere with the functioning of smallholder seed systems, they are often introduced with the aim of improving food security by promoting the cultivation of modern high-yielding varieties, developed and marketed by the private sector and-sometimes in the case of certain crops, the public breeding sector. These laws set requirements relating to the properties of new varieties and to the capacity and facilities of breeders and seed multipliers. Often these requirements cannot be met by farmers wishing to register their own varieties and market their own seeds.

Moreover, the following developments; that have direct implications towards farmers' seed system are underway; 1) the recent takeovers of some of the most established southern African seeds companies (PANNAR; MRI; SeedCo) by large, global seed companies. 2) the speed of regional harmonisation of seed and plant variety protection laws that lacked both input from farmers and an adequate understanding by regional policy makers of farmers' seed systems—and how they may be affected by these policies; 3) the possible human rights implications of a UPOV based, plant variety protection regime—particularly on Farmers' Rights to save, use, exchange, and sell their seeds.

Strategy(ies) used:
In Zimbabwe, CTDT has a prominent role in facilitating dialogue between farmers and governments on seed laws and Farmers' Rights. Gaps between policy and local implementation, especially farmers' participation in decision-making processes and awareness raising, remains an issue for many countries—also Zimbabwe. Through years of collaboration and trust building, CTDT has enabled farmers; *through FFS, farmer field days, seed and food fairs*, to openly share their experiences and concerns as concrete inputs to national legislation pertaining to the ITPGRFA. CTDT facilitated

dialogue and awareness-raising amongst stakeholders that allowed farmers to be well informed on recent developments concerning their seed and farming systems.
A national high-level multi-stakeholder workshop, *Promoting Seed, Food and Nutrition Security in Zimbabwe in the Context of Climate Change* was held in March 2015 and raised awareness on seed laws and Farmers' Rights.
The workshop resulted in the formation of a Seed Security Network Dialogue Initiative in Zimbabwe. This network will review the current seed laws and the establishment of a national seed policy, with an integrated seed system approach. The proposed policy will highlight how best to formulate and implement an alternative plant variety protection policy through *sui generis* legislation, in order to incorporate and guarantee Farmers' Rights, as articulated in the International Treaty on Plant Genetic Resources for Food and Agriculture.

Results:
The program significantly contributed to *awareness raising on issues related to Zimbabwe's seed laws among farmers*, their union leaders, academics and policy makers through awareness raising meetings and policy workshops. In collaboration with the Ministry of Agriculture, a draft *Plant Genetic Resources Management and Farmers Rights Bill* was produced and is currently with relevant authorities. However challenge with Zimbabwe's political and socio-economic environment is making it difficult to further engage policy makers to present the draft bill in parliament.

The program have some contribution in raising awareness on the negative aspects of the South Africa development Community (SADC) and African Intellectual Property Organization (ARIPO) Seed Harmonization Protocols resulting in the Government of Zimbabwe not signing the 2 regional protocols. However convincing policy makers needs a lot of resources, collaborative efforts with other like-minded organizations, experienced legal minds time and commitment to achieve the desired results.

Recommended practice:
The experiences with FFS in Zimbabwe allowed the partner in Zimbabwe, CTDT, to gain insight of farmers' challenges and needs in managing their seed system. This knowledge provided concrete evidence to inform national and/or regional policies on farmers' seed systems. The proactive effort taken by CTDT in setting examples, and creating coalitions to promote change, from local, to national, and to regional levels played a key role in ensuring the Programme in achieving its objectives. This local, to national, to regional and/or global *evidence-based, policy engagement* is a model which can be adapted by others regardless each country may have different approach and emphasis regarding seed policies engagement.

Application:
This recommended practice has been scaled up and applied in the Sowing Diversity=Harvesting Security (SD=HS) Programme, in particular under pillar 1 " Scaling up models", in which one of the objectives is to empower IPSHF to engage in and contribute to policy change at local, national and global level.

Implications for IFAD's operations and policies:
One of the pillars of IFAD's results delivery is to ensure that its knowledge management efforts must be able to identify, develop and promote successful and innovative approaches and interventions that have demonstrated potential to be scaled up. As such, IFAD acknowledges that building a comprehensive evidence base of development solutions for the rural sector and strengthening IFAD's capacity to more

effectively bring these to bear in policy processes at country, regional and global levels should be key priorities. Hence, the Programme' evidence base approach towards influencing local to national to regional and/or global policies is in line with IFAD's. IFAD should continue promoting Programmes that generate lessons and evidence to shape policies, institutions and practices for expanded impact in terms of rural poverty and hunger reduction. It may benefit from having a systematic production of data and evidence of effectiveness as well as on more proactive mobilization of knowledge from partners.

Scaling up:
Awareness raising and brokering partnerships between the communities and key stakeholders at local, national and international levels will be scaled up to other countries in the SD=HS Programme. The SD=HS Programme will permit greater opportunity for exchange, learning, and coalition building with other partners and stakeholders in other countries, such as in Laos and Myanmar. Leaning and exchanges will be further documented into evidence-based local to global narratives, in order to influence international policy discussions. Knowledge management is essential particularly to further articulate how existing policies and regulations have negative implications on the functioning of famers' seed systems and how to address this through informed decision, at national and international levels.

Conclusions and recommendations:
Seed laws have been developed to protect the farmer against poor quality seeds and the breeder/producer from unfair competition and counterfeiting. To date, the implication of seed laws on the functioning of small scale famers' seed system is however not positive. For example, it has negative impact towards the current practices in small scale farming systems to exchange and sell seeds. The Programme's FFS, seed fairs, food fairs and farmer field day have been able to inform and increase farmers' awareness on Farmer's Rights and the Right to Food. Through these venues, farmers have become more confident to openly share their experiences and concerns as concrete inputs to national legislations. On the other hand, through the multistakeholder workshop, the Programme also raised awareness for broader stakeholders including government authorities of the implications of seed laws to farmers' seed systems.
The knowledge on local realities as well as the local, national and regional seed policy regime has allowed the Programme to provide concrete evidence-based inputs towards the discussion on seed laws. It is also important to continue assisting farmers to claim and establish a role in policy making at the national level, and to support them in the formulation of views on addressing PGR and food production policies.

Collaborators:
CTDT: Programme's partner in Zimbabwe.
ANDES and SEARICE: Programme's partners in Peru and Vietnam respectively.
IFAD and Oxfam Novib: financial support and technical backstopping. Oxfam Novib provides as well the coordination of the global component of the Programme and overall management of the Programme implementation.

Links and resources:
CTDT. 2016. Trimester Report: Final. Putting Lessons into Practice: Scaling up people's biodiversity management for food security. I-R-1371-OXFAM. Harare: 2016.
Oxfam Novib, ANDES, CTDT, SEARICE, CGN-WUR (2015). Internal Evaluation Report. 3-9 September 2015. Vietnam. The Hague: Oxfam Novib.

3. Learning Note from Peru

Title: The role of women's traditional knowledge in potato repatriation in Lares, Peru

Region/country: Peru
Contact information:

- Malu Ndavi, Senior Programme Officer, IFAD
- Rima Alcadi, Grants Portfolio Adviser, IFAD

Date: 20 June 2016
Primary subject area: women's roles in seed management, traditional knowledge

Description of issue and context:

In Peru, the Programme directly benefited 2,062 Quechua families in 23 rural communities, in Lares. This is one of the poorest districts in Cusco, according to INEI[55], whose figures show that 97.8% of the population there live in poverty, and of those, 89.2% live in extreme poverty. The Lares valley is located at the centre of the origin of potato, an area nurtured for centuries by the deep-rooted, local food systems of the Quechua peoples.[56] Potato is important to the Quechua peoples' food and nutrition security and to their livelihoods. The farmer seed system of saving and exchanging Andean potato tubers has played an important role in maintaining diversity for thousands of years, and continues to be the norm in potato cultivation today. This informal seed system[57] provides 95% of the tuber seed for the Andean regions. A study focused on the seed network in the Andean countries[58] reported that supplies of tuber seed in local markets were not always reliable.
The baseline survey corroborated an earlier study, that climate change poses a serious risk to food security in the Lares district. Schaefleitner *et al.* (2011)[59] have reported that in the coming years, potato cultivation will be increasingly affected in many of the present cultivation areas; mostly by heat stress. This means that the appropriate conditions for potato crops are expected to shift to ever higher altitudes. It is also predicted that temperature increase will result in more virulent outbreaks of potato diseases that could result in increased yield losses.[60]
In Lares, women are the principal custodians of seeds and are responsible for households' seed-management activities. They are directly responsible for food crop production and take into consideration seed selection factors that are critical for families' food and nutrition security. The baseline survey in Peru confirmed that women in the Programme areas have continuously adapted their seeds to the different agro-ecological zones,[61] and maintained knowledge of varieties that have been adapted to different ecological niches and varying altitudes.[62] Farmers in Lares have observed climate change, and responded by cultivating and assessing higher number of cultivars for adaptation. It is reported that they adapt to increased drought incidences by cultivating more drought tolerant traditional variety[63], and

[55] Instituto Nacional de Estadística e Informática. 2010.
[56] ANDES. 2013.
[57] Agriculture in developing countries is characterized by small-scale farming, which relies heavily on the informal – rather than the formal, commercial– seed system, and is the basis for farmers' livelihoods and national food security in these countries. One of the primary features of the informal seed system is the wide spread practice of freely saving, replanting, exchanging and selling seed (Berne Declaration. 2014).
[58] Zimmerer, K.S. 2003.
[59] Schaefleitner, R., J. Ramirez, A. Jarvis, D. Evers, R. Gutierrez, and M. Scurrah. 2011.
[60] Rodomiro Ortiz. 2012.
[61] Low, Middle, and Upper Zones
[62] ANDES. 2013.
[63] Boli variety in the Middle and Upper Zones

use resistant variety[64] to respond to increased pest/diseases occurrences; also by changing their land use—i.e. growing their preferred varieties at higher altitudes. The baseline survey also highlighted that in 100% of households in the Upper Zone, the women largely make decisions about which potato varieties to cultivate, since they are most familiar with the characteristics of the native potato varieties grown in their community (shape, colour, taste and flavour of the tubers). These selection criteria have developed as a result of years of experience, and aim to help manage risks such as climate variability and pests and diseases while optimising productivity.

The baseline survey results revealed that almost all farmers in the Low and Upper Zones attributed the loss of traditional species to extreme weather events. Fifty percent attributed an increase in pests and diseases to climate change, which was resulting in increased problems for their crops.[65]

With an overview of the combined challenges of climate change and access to seeds, it is clear that the formal seed system has played an important role, primarily in introducing new varieties, including many selected for resistance to pests and diseases particularly late blight (in the selection of which, farmers play a key role). The International Potato Center (CIP) reported that two modern varieties released (by CIP) in 2004—and which farmers helped test and evaluate—sustained yields of five tonnes per ha in 2010, when the potato crop was infested with late blight.[66] Yields of other varieties decreased to two tonnes per ha in that year.[67] Nevertheless, the Programme in Peru showed that successful on-farm conservation effort that is required to adapt to climate change, benefits from the use of both, the scientific knowledge and the traditional knowledge; especially those contributed by women.

Strategy(ies) used:

Given the challenges posed by climate change and the uncertain availability of potato cultivars in the market, the Programme's prime intervention in Peru focused on increasing access to plant genetic resources (PGR). This was done by transferring a high number of native potato cultivars (approximately 400) from one Programme area in Peru to another, i.e., from the Potato Park[68] to the Lares valley, under an agreement between the Potato Park communal gene bank and the Lares communities, with support from CIP and Programme partner, ANDES. CIP also assisted in evaluation trials of potato varieties in the Potato Park. This model is based on an indigenous landscape approach that contributes to a key objective of on-farm conservation: maintaining crop evolution in farmers' fields and landscapes. The approach supports farmers' efforts to adapt cultivars to their changing field conditions and to socio-cultural preferences. The repatriated seeds have enriched Lares communities' traditional seed systems. Both women and men farmers have been able to experiment with and reintroduce the repatriated seeds, selecting some—especially those with climate resilient traits—and discarding the rest. From the first repatriation batch, only 19 of 174 cultivars survived late blight.[69] An important lesson learned from the first repatriation (and useful for future reintroductions) has been the need to build on and advance the existing traditional knowledge of Lares communities—in particular of Lares women. Traditional knowledge embedded in local customary laws recommends that land infested by late blight be allowed to return to full organic fertility before re-cultivating. Fields on such land should be allowed to rest for at least six years (fallow period) before planting a new potato crop, in order to restore the soil

[64] Canchán variety in the Middle Zone and Boli variety in the Upper Zone
[65] ANDES. 2013.
[66] *Phytophthora infestans* causes the serious potato disease known as late blight or potato blight.
[67] Personal communication with R. Salazar. 2015.
[68] The Potato Park was established to conserve potato biodiversity in the Cusco region of Peru. For information, visit the Potato Park website: http://www.parquedelapapa.org/eng/03parke_01.html
[69] Oxfam Novib et.al. 2014.

condition. The fact that only 19 cultivars survived highlights the importance of Lares farmers' traditional knowledge which, for decades, has been essential for managing and adapting plant genetic resources in a changing context. It also underlines the importance of community monitoring and evaluation in future potato (re)introduction efforts. After the first repatriation, women and men farmers subjected the surviving cultivars to further observation, since they have the potential for blight resistance. Farmers' experience with the first transfer resulted in the transfer of a new batch of 225 cultivars to a communal plot, located at higher altitude areas in the Lares valley. Based on this experience, a protocol is being drafted by the Potato Park, Lares communities, and ANDES[70] for the transfer of material from the Potato Park to Lares. Farmers'—especially women's—traditional knowledge, is embedded in the protocol.

Women are often responsible for the informal seed exchange systems (including knowledge exchange). Acknowledging this, the Programme in Peru has built on women's social networks to strengthen farmer-to-farmer knowledge and skills transfer. It showed that women's tradition of *sharing and exchange* can form an integral part of strengthening farmers' seed systems. Exchange between women has enabled further dissemination of technical capacities (e.g., on-farm management and plant breeding, the production of good quality seeds, and the maintenance of associated knowledge) to communities outside the Programme's target areas.

Results:

The case study in Peru illustrates one of the Programme's major achievements: to provide farmers with greater access to diverse plant genetic resources, through cooperation between the Lares communities, the Potato Park, and CIP. It also demonstrates how women farmers were able to strengthen their technical capacities by participating actively in the assessment and selection of repatriated native potato cultivars, and in the evaluation of the reintroduction process. The transfer of native potato cultivars back to the Lares communities allowed women and men farmers to select from a range of cultivars that had previously been lost from their fields. This reintroduction contributes significantly to the community diversity portfolio and enables them to respond to changing climatic and socioeconomic conditions. The repatriation highlights the importance of building on traditional knowledge—especially women's. Further collaboration is foreseen, to ensure that the protocol for transfer from public breeding institutes will be tailored to better address farmers' needs and better facilitate their requests for germplasm. In addition, the case study illustrates the importance of strengthening the role of the barter market, through which farmers in and outside the community can exchange crop products and seeds, while sharing related knowledge and experience in seed management and farming.

Recommended practice:

The Programme in Peru shows that the FFS in Lares benefits from, and builds on, decades of traditional knowledge from the Lares communities, and that it promotes further exchange of women's traditional knowledge, in particular. It also confirms that although men and women both have traditional knowledge, both are specialised in observing different biocultural indicators. For example, while men observe the moon for an indication of the appropriate sowing time, women use their knowledge of the biocultural

[70] ANDES. 2014.

indicators of plants and animals to select the best sites. Women in Lares are also recognised for their local knowledge about seed selection, storage, and exchange and barter. Through the FFS, local knowledge was exchanged and recognised as women's contribution to community seed management. Hence acknowledgement of the specialized contribution and local knowledge of women in seed management, compared to those from men, is needed to develop an effective methodology and tools. The Programme has included women's knowledge and taken into account their challenges in the refinement of the FFS curricula and field guides (see scaling up section below).

Application:

The approach illustrated in Peru has been scaled up and applied in the Sowing Diversity=Harvesting Security (SD=HS) Programme, through the activities under pillar 1 "Scaling up models". Further work to understand the role of traditional knowledge in seed management especially those contributed by women is embedded in the first objective of pillar 1 "IPSHF in the SD=HS countries have enhanced capacity to develop and implement innovative PGR adaptation strategies, concepts and tools, integrating traditional and scientific knowledge and gender perspective, and benefiting from greater access to PGR".

Implications for IFAD's operations and policies:

IFAD's strategic objectives stated that an emphasis on women is important given their major roles in food production and marketing, and caring for the household. It also acknowledged that collaboration with and engagement of indigenous peoples' communities in the provision of environmental services that are sensitive to their traditional knowledge and culture will be an area of focus. The Programme in Peru confirms the importance of women's roles and traditional knowledge in seed management; which therefore in line with IFAD's focus of engagement.
The IFAD strategic framework reported that IFAD will continue to focus on ensuring that poor rural communities and individuals – particularly women, indigenous peoples and young people – become part of a rural transformation that is inclusive and drives overall sustainable development.
Not only women and indigenous peoples should become one of the key focus of future Programmes, but also promotion of their knowledge and exchange of these knowledge with scientific communities is recommended.

Scaling up:
The Programme have developed three innovations to ensure women's inclusion and participation for further scale-up and refinement in the future. The first example of innovation is the *inclusion of women's preferences when defining communities' breeding objectives*. The Programme modified the participatory tools used in FFS, to make them more gender-sensitive and to ensure they better accommodate women's needs and preferences. This includes the integration of climate change modules, to promote further exchange between farmers (women and men) and experts in climate, agriculture, and plant genetic resources, in order to find local solutions to climate change issues. The second example of innovation is *the improvement of learning methodologies and exercises on gender role awareness in the FFS curriculum*. The curriculum can be improved further, to include both gender and social inclusion perspectives. The third example of innovation is that the Programme helped empower women by strengthening their technical knowledge and increasing their self-confidence.

Conclusions and recommendations:
In Lares, women are the principal custodians of seeds and are responsible for households' seed-management activities. Women have adapted their seeds to the different agro-ecological zones as well as developed criteria for seed selection with the aim to help manage risks such as climate

variability and pests and diseases while optimising productivity. The Programme also noted that forging the collaboration with the formal sector through FFS—for example, to access to native cultivars that were lost from the fields, has benefitted the communities. On the other hand, the Programme confirmed that traditional knowledge is indispensable in on-farm conservation and management for climate change adaptation. Future Programme should focus on women and indigenous peoples as well as should promote a better understanding on the use of both traditional and scientific knowledge.

Picture 1. Women farmers in Lares gather and select potato tubers for the next planting season during an FFS session.

Photo: Jiska van der Heide/ Oxfam Novib

Picture 2. Rich selection of potato cultivars managed by the women farmers in Lares

Photo: Jiska van der Heide/ Oxfam Novib

Collaborators:

IFAD and Oxfam Novib: financial support and technical backstopping. Oxfam Novib provides as well the coordination of the global component of the Programme and overall management of the Programme implementation.
ANDES: Programme's partner in Peru.
CTDT and SEARICE: Programme's partners in Zimbabwe and Vietnam respectively.

Links and resources:

Oxfam Novib, ANDES, CTDT, SEARICE, CGN-WUR. 2016. Women's roles in biodiversity management. From lessons to practice and impact: Scaling up people's biodiversity management. Oxfam Novib case: April 2016. Submitted to the State of the World's Biodiversity for Food and Agriculture. The Hague: Oxfam Novib.

ANNEX 3. STATEMENT OF EXPENDITURE

Name of Recipient: Stichting Oxfam Novib
Grant No: I-R-1371-OXFAM
Name of Programme: Programme for Scaling up Peoples' Biodiversity Management for Food Security
Reporting period: from 1 October 2014 to 31 December 2015, in US Dollars

	Category of Expenditures	IFAD Budget 3 years		Received Installment 1-3	Spent year 1 -3 pro rata	Outstanding
		as contract	**as 1.12.2014**			
I.	Staff	348.000	313.302	281.972	343.541	- 61.569
II.	Consultancies	62.000	87.268	78.541	72.161	6.380
III.	Travel	119.000	101.879	91.691	97.936	- 6.244
IV.	Research	38.000	98.961	89.065	101.412	- 12.347
V.	Training and workshop	77.000	97.753	87.977	104.637	- 16.660
VI.	Conferences and meetings	168.000	121.828	109.645	123.166	- 13.521
VII.	Equipment	65.000	65.096	58.586	63.782	- 5.196
VIII.	Publications	28.000	18.818	16.936	19.470	- 2.534
IX.	Overhead	95.000	95.096	85.586	92.765	- 7.179
	Totals	**1.000.000**	**1.000.000**	**900.000**	**1.018.872**	**- 118.872**

We hereby certify that the above amounts have been expended for Eligible Expenditures for the proper execution of the Programme in accordance with the terms and conditions of the Agreement dated 15 August 2012.

Name and Title: Dated: 23 June 2016

Notes to Annex 2: Statement of Expenditure

Column “IFAD Budget 3 Years” on the previous page: The years 1-3 original budget of USD 1,759,000 was approved on 21 July 2012 (as contract); on 4 December 2014 a revised years 1-3 budget was sent to IFAD, as part of the Year 2 Progress report (as 1-12-2014). This revised years 1-3 budget reflects total amounts per cost category after a re-allocation from "Travel" to "Consultancies" and to "Training and workshop". Reason for this budget revision was a more than 10 % variance between budget and expected spending for the three years.

Column “Received Instalment 1-3” on the previous page: A first instalment of USD 302,254 IFAD funds was received on 20 September 2012, representing 90 % of the original budget for year 1, IFAD share, i.e. 57%. A second instalment of USD 333,068 IFAD funds was received on 12 February 2014, representing 90 % of the AWPB year 2, IFAD share. A third instalment of USD 264,678 IFAD funds was received on 24 December 2014, representing 90 % of the AWPB year 3, IFAD share. The total amount of USD 900,000 received until today has been allocated to the categories based upon cost-category proportions as per revised budget sent to IFAD on 1 December 2014.

Column “Spent year 1-3 pro rata” on previous page reflects IFAD share of 57 % of the total expenditure per category in year 1 - 3 together.

Total Spent year 1-3, IFAD share, amounts to USD 1,018,872, illustrating the final 10% payment is due pending approval of the Grant Completion Report.

We refer to Annex 3 here below for a detailed analysis of Budget-to-Actuals for year 3 and to Annex 3c for a comprehensive year 1-3 Budget-to-Actuals analysis.

ANNEX 4. DETAILED OVERVIEW OF 3 YEAR BUDGET AND AWPB YEAR 3 COMPARED TO EXPENDITURE YEAR 3 (15 MONTHS)

Category of Expenditures		AWPB Yr 3: Oct 2014-Dec 2015			T6: 1 Oct - 31 Dec 2014			1 Jan 2015- 31 Dec 2015			Year 3 (15 mths)	
					Spent			Spent			Spent	Depletion
		IFAD	ON	Total	IFAD	ON	Total	IFAD	ON	Total	Total	as %
I.	Staff	104.060	78.977	183.037	28.450	21.565	50.015	91.681	69.582	161.263	211.278	115%
II.	Consultancies	50.599	38.402	89.000	4.344	3.293	7.637	29.341	22.268	51.609	59.247	67%
III.	Travel	44.148	33.506	77.654	8.703	6.597	15.300	35.014	26.574	61.589	76.889	99%
IV.	Research	37.570	28.514	66.084	- 219	- 166	- 384	31.034	23.553	54.587	54.203	82%
V.	Training and workshop	24.665	18.719	43.384	8.895	6.742	15.637	17.881	13.571	31.453	47.089	109%
VI.	Conferences and meetings	49.102	37.266	86.368	3.834	2.906	6.741	45.619	34.623	80.242	86.983	101%
VII.	Equipment	57.721	43.808	101.529	1.258	953	2.211	55.119	41.833	96.952	99.163	98%
VIII	Publications	17.738	13.462	31.200	1.654	1.253	2.907	15.317	11.625	26.942	29.849	96%
IX.	Overhead	38.174	28.972	67.146	5.867	4.447	10.313	29.071	22.064	51.135	61.448	92%
Totals		**423.776**	**321.626**	**745.402**	**62.786**	**47.592**	**110.379**	**350.079**	**265.693**	**615.771**	**726.150**	**97%**

Notes to Annex 3: Detailed Overview of 3 year budget and AWPB year 3 compared to expenditure year 3 (15 months)

On date 31 March 2015 OxfamNovib received approval from IFAD on their request to extend the Programme with 6 months until 31 March 2016 (no cost extension). The reason hereto was to properly anticipate any possible delays, should they occur, with the Lares construction in Peru and our participation in the

6th Governing Body (GB) meeting of the International Treaty for Plant Genetic Resources for Food and Agriculture (ITPGRFA) which would be a key milestone in our scaling up framework. The 6th Governing Body meeting took place October 2015, right after initial Programme completion date of 30 September 2015.
The IFAD annual reports have run from the period 1 October 2014 to 30 September 2015. This 3rd and final year, due to the no cost extension granted until the 31 December 2015, the IFAD Closing report describes the period 1 October 2014 to 31 December 2015.
By contrast the Programme audit reports have run for the period 1 January to 31 December to enable the Programme to benefit from cost efficiency by combining the Programme audits of partners with their financial year and their institutional audit.
Columns 1-3 in Table above presents the year 3 budget (as at 1-12-2014) amounting to USD 745,402, financed by IFAD (USD 423,776 or 57%) and ON (USD 321,626 or 43%): the year 3 budget is valid for the period from 1 October 2014 until 31 December 2015 and comprises 15 months.
Columns 4-9 presents the actual spent for the activity period, columns 10-11 present the Spent and Depletion: actual expenses incurred in this 15 month period amount to USD 726,150, representing a 97% depletion of the year 3 budget.

Notes to the statement of expenditure

IFAD finances USD 1,000,000 representing 57 % of the total three year IFAD / ON budget of USD 1,759,000, whereas ON finances USD 759,000 which is 43 % of the total three year budget.

Cash flow report

Receipts year 3

ON requested IFAD to transfer the third instalment of USD 264,678 representing 90% of Year 3 AWPB amounting to USD 393,986 and reflecting IFAD share (57%). This was matched by ON share of funding of USD 299,017 (43%) out of MFS (Dutch Ministry of Foreign Affairs funding). Total original year 3 available budget amounts to USD 693,003.

At the time of submission of the year 2 Annual Report in date 4 December 2014, the year 3 budget included in here amounted to USD 745,402 (year 3 budget as at 1-12-2014).

ON received USD 264,678 in date 24 December 2014.

According to original contract in 2015 no disbursements were made out from ON to CTDT and SEARICE: the funds for the year 3 plan had already been transferred in date 15 December 2014. ON released the year 2 instalments to counterpart ANDES once approval was given to the 'Procurement plan, procedures and budget in relation to the Lares infrastructure' in November 2014. After the ON monitoring visit to the Lares infrastructure in July 2015, ON observed that the seed bank infrastructure was proceeding as per the November 2014 submitted plan and documented adequately, hence also the year 3 instalment was made out to ANDES.

In June 2015 a supplementary grant and transfer of Euro 66,700 or USD 72,552 was made out to SEARICE, due to a change in country of where the IFAD Evaluation and final GPC Meeting was going to take place: originally this was foreseen to take place in Peru, however, the Driebergen GPC Meeting January 2015 as well as subsequent consultation with IFAD in March 2016 resulted in the selection of Vietnam. The supplementary grant to SEARICE was to transfer the additional year 1 audit expenses incurred and to cover for implementing additional FFS activities to prepare for the IFAD External Evaluation, as well as for (preparatory) activities with the communities, hosting and logistics of the IFAD Evaluation Committee.

Cash flow wise, Global/ ON implementing activities are funded fully out of MFS funding.

The final payment of the fund balance as per local auditors' report to the counterparts ANDES, CTDT and SEARICE is to be made out upon receipt of IFAD approval of the Grant Completion Report and IFAD's final payment to ON.

Expenses year 3

Total actual expenses in the extended year 3 (15 months) amount to USD 726,150. This means a depletion of 97 % of the year 3 budget as at 1-12-2014 (USD 745,402).

At the level of the counterparts, regarding the year 3 revised budget counterpart Andes spent 99 % of USD 233,118, Searice spent 90 % of USD 122,379 year 3 budget plus additional USD 72,552 supplementary grant, CTDT spent 98 % of USD 158,701 year 3 revised budget and ON Global spent 96 % of USD 168,950 year 3 revised budget (being ON Global year 3 revised budget of USD 241,205 less the USD 72,552 supplementary grant to SEARICE).

Compared to the year 3 revised budget (USD 745,402) the categories 'Staff' and 'Training & Workshops' show a high depletion rate (resp. 115 % and 109 %), whereas categories 'Consultancies' and 'Research' show a low depletion rate of 53% and 82% respectively. The reason for the higher than budgeted expenses in Staff is due to 1) staff being paid to accommodate the GB6 activity in October

2015, 2) staff and communities having to prepare and being subject to the IFAD Evaluation twice, that is in September 2015 as well as in December 2015, and 3) preparation and submission of the grant final (audited) report. Lower than budgeted expenses in Consultancies is primarily due to the fact that the year 3 revised budget for Consultancies took into consideration the significantly higher than budgeted year 1 audit expenses incurred, due to different interpretation of donor requirements by the Group auditor; at the same time lessons from year 1 group audit made us change auditor and approach in year 2, hence audit expenses have actually come in lower than year 3 revised budget (covering for year 2 and year 3 actual audit expenses).
As indicated in year 2 Annual Progress (1 December 2014), Table on page 75 we already forecasted expected spending of USD 1,811,351 and a depletion of 103%.
We refer to the table right hereafter for a comprehensive review of Y1-Y3 Budget-to-Actuals.
IFAD share of the actual expenses amounts to USD 1,018,872. Final IFAD payment due as per contract amounts to USD 100,000. Oxfam Novib will have to find additional resources to fund the deficit of USD 18,872. We herewith submit the Cash Replenishment form for the final payment of USD 100,000.

Annex 3c: Comprehensive Review of Years 1-3 Expenses compared to Budget

Category of Expenditures		Budget 3 years as at 1 Dec 2014			Y1-3: 1 Oct 2012 - 31 Dec 2015 Spent 42 mths			Deple
		IFAD	ON	Total	IFAD	ON	Total	tion
I.	Staff	313.302	237.781	551.083	343.541	260.731	604.272	110%
II.	Consultancies	87.268	66.232	153.500	72.161	54.767	126.928	83%
III.	Travel	101.879	77.321	179.201	97.936	74.328	172.264	96%
IV.	Research	98.961	75.107	174.068	101.412	76.967	178.380	102%
V.	Training and workshop	97.753	74.190	171.942	104.637	79.415	184.052	107%
VI.	Conferences and meetings	121.828	92.462	214.290	123.166	93.477	216.643	101%
VII.	Equipment	65.096	49.404	114.500	63.782	48.407	112.189	98%
VIII.	Publications	18.818	14.282	33.100	19.470	14.777	34.248	103%
IX.	Overhead	95.096	72.173	167.268	92.765	70.404	163.169	98%
Totals		**1.000.000**	**758.952**	**1.758.952**	**1.018.872**	**773.275**	**1.792.146**	**102%**

Column “Budget 3 years as at 1 Dec 2014”: this column represents the budget for the years 1-3 of USD 1,758,922 as reported to IFAD in its Annual Progress Report year 2 (Annex 3, pages 72-76), including the part financed by IFAD (USD 1,000,000) and the part financed by Dutch Ministry of Foreign Affairs (MFS, USD 758,952).
Column “Y1-Y3: 1 Oct 2012 – 31 Dec 2015 Spent 42 months”: this column reflects the cumulative spent during the extended contract period from 1 October 2012 until 31 December 2015 (42 months). Y1-Y3 cumulative spent amounts to USD 1,792,146.
Column: “Depletion”: Y1-Y3 spent shows a depletion of 102% of the Y1-Y3 budget (as contract).

Notes to Annex 3c:

We refer to Annual Progress Report year Two (2013-14) Annex 3 Detailed Overview of 3 year budget and AWPB year 2 compared to expenditure year 2, Table page 74: column Year 3 AWBP amounts to USD 745,402 and column: Proposed budget as per 1-12-2014 amounts to USD 1,758,952 and column Expected total spending amounts to USD 1,811,351 and column Expected depletion amounts to 103%.

Overall Years 1-3 accumulated expenses amount to USD 1,792,146. This means a depletion of 102% of the contracted years 1-3 budget (USD 1,758,952), and in line with the forecast included in the Year 2 Annual Progress Report, that is Expected spending of USD 1,811,351 and Expected depletion of 103%. Compared to the revised years 1-3 budget the categories 'Staff' and 'Training & Workshops' show a high depletion rate (resp. 110 % and 107 %), whereas categories 'Consultancies' and 'Travel' show a low depletion rate of 83% and 96% respectively. The reasons for the high expenses in Staff is due to the following; 1) staff being paid to accommodate the GB6 activity in October 2015, 2) staff and communities having to prepare and being subject to the IFAD Evaluation twice, that is in September 2015 as well as in December 2015, and 3) preparation and submission of the grant final (audited) report after the close of the Programme activity period. The reason of low expenses in Consultancies is primarily due to the significantly higher than budgeted year 1 audit expenses, as a result of a different interpretation of IFAD donor requirements by the Group auditor. The budget for audit was increased, and at the same time, lessons from year 1 group audit made us change auditor and approach for years 2 and 3, hence audit expenses have actually come in lower than its revised budget.

ANNEX 5. PROGRESS TOWARDS OUTCOMES

INDICATORS

As defined during inception meeting in Vietnam (2012), the Programme defined four key indicators to monitor the progress towards achieving outcomes indicators; as follows:

Food Security - having sufficient, safe, and nutritious food for the household.
Seed Security - having diverse choices of varieties that suit the capacity and needs of the community/farmer.
Policy Engagement - refers to the participation of farmers (women and men) in policy-making processes that affect their lives and livelihoods.
Women Empowerment - refers to enabling women to enjoy equal rights and privileges as men, and to exercise their roles as partners in development. (Indicators for women empowerment are embedded in the first three output indicators)
The following section summarizes the progress in these indicators in the three countries.

Peru

Seed Security / PGR milestones:

	Baseline	**Endline**	**Analysis/Explanation**
X% of farmers (men and women) trained and practicing PGR management on-farm *	0	164 farmers are permanent members of FFS and practicing PGR on farm (100 women and 64 men; 400 farmers participate in other capacity development activities	
X% increased availability of IPs and Small landholder farmers produce at market and/or barter *		Farmers take 20% of production to barter and other markets	50% is for self-consumption; 20% for seeds; 10% for animal feed
Market/ barter access established *	977 families participate in 4 barter markets	1037 families participate in barter markets; 260 families participating in seed exchanges	30 new families from lower zone participate in barter markets
Established seed production groups (Zimbabwe)			
Capacities of X number of			

	Baseline	Endline	Analysis/Explanation
farmers on seed production developed (Zimbabwe)			
No. of potentially climate resilient seeds identified by farmers	0	225 varieties of potato transferred from the Potato Park; 223 adapted to local conditions; 37 varieties of yellow corn and 60 varieties of white corn grown by local farmers identified	
Increased reference to women's role in Farmers Rights and Right to Food (seed selection criteria of women considered in the FFS	0	Participation of 100 women in FFS; women's criteria for seed selection considered in PPB/PVS	

Food Security Milestones:

	Baseline	Endline	Analysis/Explanation
Number of FFS/ training Organized (% women participated)	0	7 permanent FFS established; 100 women participating, 64 men; 190 training sessions organized with 1580 women participating, 1497 men	
% of IP and Small Landholder Farmer testing farming practices adapted for CC (% women participation) -No. of potentially climate resilient seed identified by farmer	Families in upper zone cultivated an average of 10 potato varieties	Families in upper zone cultivate an average of 30 potato varieties 42 local varieties of potatoes identified; 225 varieties introduced from the Potato Park; # potentially climate resilient seeds identified	20 new varieties of clean seeds were distributed per family in upper zone, selected for resilience and nutritional properties
Women preferences		Women's	Participation of women in

	Baseline	Endline	Analysis/Explanation
considered in farm testing		preferences considered in selection of varieties for PPB in corn	FFS includes women's preferences in process
Testing women – sensitive technologies		Barter market users group established	

Policy Engagement milestones:

	Baseline	Endline	Analysis/Explanation
FFS Identify policy areas	0	28 local workshops; 3 at the national level	
Policy brief on evidenced-based adaptation on local perception CC (GB5)	0	5 policy briefs presented	
Policy brief on women's role on the market (barter, seeds market)	0	1	Global program policy brief produced
Bio-cultural protocol (define focus, y_1)	0	Biocultural protocol developed and tested in Parque Chalakuy	
FFS advocates trained in policy advocacy (modules) Y_1 FFS policy analysis on seeds, UPOV, CC (RtF – HR) 20% Y_1	0	FFS participants trained in policy advocacy Seed policy workshops Policy proposal developed and submitted to Member of Andean Parliament	Policy mix matrix produced and validated by community members A local adaptation plan has been shared for consideration at the national level
Gender sensitive learning modules for FFS (PGR) Y_1 - test	0	1 training module on gender analysis	

Progress Towards Grant Purpose And Goal

- The implementation of all Programme activities and the expected outputs are generally on track in contributing to the Programme goal.

Vietnam

1. Seed Security / PGR Milestones

YEAR 1 T0-T2 (Oct 2012 – Sep 2013)	YEAR 2 T3 – T5 (Oct 2103 – Sep 2014)	YEAR 3 T6-T8 (Oct 2014 – Sep 2015)
±50% of farmers (men and women) trained is practicing PGR management on-farm. * • A total of 100 out of 180 trained farmers (56%) have joined follow up FFS and apply the technical knowledge in their rice seed selection, development and conservation.	**±50% increase from year 1,** of men and women farmers trained and practicing PGR management on-farm. • Yes this is achieved beyond the target, as evidenced by all the FFS sites continuing the field studies, with 300 farmers comprising 15 farmers' groups, and the rest of the trained farmers as households doing field studies in their own farms.	**50%** of farmers training other farmers • 60%, 380 out of 630 FFS farmer participants have exchanged the rice seeds and disseminated the results of the Programme to others. The knowledge shared focused on IPM, SRI, rehabilitation of rice varieties and evaluation of new rice varieties. • Particularly, in the 2015 spring crop season, the Programme provided 38 key farmers in 5 provinces with advanced training to provide technical help to the outsiders in applying the comparison techniques, rehabilitation and SRI in their own fields.
10% increased availability of EMs' and Small landholder farmers' (SHFs) produce at market and/or barter within the Programme area * • It can be safely said that 10% of the FFS-trained farmers' produced seeds have reached the market or barter market within the Programme area, through seed exchanges.	**20%** increased availability of EMs' and SHFs' produce at market and/or barter within the Programme area. • Yes, this is achieved, with 300 trained farmers comprising 15 farmers groups, one each from the 15 follow up field study sites in 5 provinces, who are already doing seed production and seed exchange. The rest of the trained farmers can also produce their own seeds from their own farms. - In Lao Cai Province: FFS-trained farmers have applied the SRI method to produce Seng Cu variety in an aggregate 8-ha farmer' fields. - In Son La Province, Pot Village, Chieng Coi Ward: 44 households (85%) in the village have used seeds of GL159, GL105, GL201 varieties	**10%** of seed demand in the country coming from the farmers • It should be noted that the Programme sites in the Northern Provinces are all subsistent in terms of agricultural production. Hence, the seeds produced in these areas are mainly for own consumption and for exchange only with other members of the community • However, in Mekong Delta alone, farmer seed clubs produced and distributed a total of 166, 852 tons of seeds in 2014 which is about 15.3% of the total seed requirement in the country

YEAR 1	YEAR 2	YEAR 3
T0-T2 **(Oct 2012 – Sep 2013)**	**T3 – T5** **(Oct 2103 – Sep 2014)**	**T6-T8** **(Oct 2014 – Sep 2015)**
	produced by FFS-trained farmers. The number of households saving seeds for next season accounts for 35% in Chieng Coi with a total amount of 400 kg seed exchanged in the community. - In Thanh Hoa Province, Da Loc commune, Hau Loc District: 49 households (21%) in Da Loc Commune planted M2 in 49,000 m2 of rice fields. - In Yen Bai Province, Bao Ai commune, Yen Bai District: 12 households have planted seeds produced by FFS-trained farmers in an aggregate 8, 000-m2 rice fields. In Yen Hop Commune, Van Yen District, there was a 5% increase in the number of households planting Chiem Huong variety, which the FFS-trained farmers have rehabilitated and produced. Some 9 households in Bao Ai Commune have saved seeds, with a total of 1430 kg for next season. In Yen Hop commune, 6 households also saved seeds. - In Hoa Binh Province, Tan Vinh commune, Luong Son district: one farmers group produced 1.2 tons of MD1 variety in an aggregate 5000 m2 of rice fields. They exchanged seeds in their communes and with farmers in other neighboring communes or sold their seeds, e.g., MD1 at the price of 14,000 – 16,000 VND/kg. Some 33 households of 4.5% of 731 households in the 4 Programme sites in Hoa Binh Province have planted seeds that were produced by the FFS-trained farmers in 283,000 m2 rice fields; and some 38 households (5.2%) saved seeds for the next season, with total of 1,772 kg. **Seed fair and seed ex-**	

YEAR 1 T0-T2 (Oct 2012 – Sep 2013)	YEAR 2 T3 – T5 (Oct 2103 – Sep 2014)	YEAR 3 T6-T8 (Oct 2014 – Sep 2015)
	changes. • Yes, this is achieved. Seed exchanges are integral part of each FFS and each follow-up FFS in the old FFS sites.	
5 Market/ barter access (seed exchange) established within the Programme area * • 5 FFS farmer groups were formed, which do the seed exchange or barter or selling of their seeds. The seed exchange ratio varies from 1:1 up to 1:3 depending on the farmers' haggling and agreement. Except in Hoa Binh, farmers usually do not barter rice seeds for rice grains, and neither for other farm produce.	• 5 market/barter access (seed exchange) established, as follows: - Chieng Coi Ward, Son La Province, with seed exchange ratio of 1:3 (FFS farmers' seeds: non-FFS farmers' seeds) - Da Loc Commune, Hau Loc District, Thanh Hoa Province, with seed exchange ratio of 1:2-3 - Yen Hop Commune, Van Yen District, Yen Bai Province, with 1:1-2 exchange ratio - Tu Ly Commune, Da Bac District, Hoa Binh Province, with 1:1 exchange ratio - Tan Vinh Commune, Luong Son District, Hoa Binh Province, farmers barter seeds for food grains (e.g. KD18 seeds for KD18 grains for food) at 1:2-2.5 ratio, or they sell their seeds (e.g. MD1 seed at 14,000 – 16,000 VND/kg).	• The rice seed exchange was set up in 19 FFS sites. • The seeds of the new selected rice varieties the farmers were interested in have been reproduced by the FFS participants at home and bartered for rice grains with other farmers within the village and within the commune at a 1:1-2-3 ratio. In particular, the group of female farmers has formed an official rice seed production group and sold their products to other farmers within the district. In order to compete with the rice seed companies, the prices of their products were always 30% lower than the price of the companies. • The female participants mainly undertook the dissemination and rice seed exchange since they took the major responsibility to prepare the rice seeds in their families. They not only exchanged the rice seeds, but also shared with each other their knowledge of the cultivation techniques such as IPM, SRI, preservation of seeds, rehabilitation of the varieties, and evaluation of the varieties. The sharing often took place in the village meetings and in the communal Women's Unions, in the field visits or exchanging transplantation activities. In addition to rice seed exchange, the FFS participants gave their neighbors the excess seedlings of the rice varieties they saved.
	Policy support (community level) on market / barter initiatives of farmers. • This was discussed during the last 15 FFDs in 5 provinces, awaiting decisions from the local gov-	• In Da Loc commune, Hau Loc district, Thanh Hoa province, at the end of the 2015 spring crop season, the CPC issued an instruction to local authorities to support the barter of M2 varieties to enable other communities affected by salinity to access this sa-

YEAR 1 T0-T2 (Oct 2012 – Sep 2013)	YEAR 2 T3 – T5 (Oct 2103 – Sep 2014)	YEAR 3 T6-T8 (Oct 2014 – Sep 2015)
	ernments.	line-tolerant variety. • The seed production farmers group in Tan Vinh commune, Hoa Binh province has received the legal document from the CPC allowing them to operate officially and to trade their own seeds.
5 Established seed production groups. • 5 farmer seed production groups were formed with a total of 100 farmer members**.**	**50% increase** in number of seed production groups (with more women members actively participating). • There are 15 seed producing farmer groups in 5 provinces with a total of 300 farmers, of which 258 (86%) are women.	• **5 Networks** of seed production groups established • More time and budget is needed to establish the network
Capacities of **150 farmers** on seed production developed. • 100 farmers from 5 follow up FFS.	**50% Increase** in number of farmers with capacities for seed production. • 300 farmers with 86% women from 15 follow up field sites.	**50% Women** occupying key positions in the farmers' groups and interacting with formal seed sector • 83.68% of the female participants (over 380 farmers) joined the follow-up FFS groups in 19 Programme sites and actively engaging other stakeholders such as technicians, researchers, and local authorities**.**
20 promising lines (traditional or local and improved or modern) potentially climate-resilient seeds identified by farmers. • 22 promising lines were selected in 4 provinces: Yen Bai, Lao Cai, Thanh Hoa, Hoa Binh during the summer season of 2013. Selection in Son La is ongoing.	**Additional 10-20 promising lines** of climate-resilient seeds identified by farmers. • Promising climate resilient lines, such as M2, and traditional varieties such as Chiem Huong, Seng Cu, and Khau Nam Xit were selected from 34 evaluated varieties; • 30 potential climate-resilient segregating lines from FCRI and 2 lines from F1 of farmers' crossbreed were selected in spring cropping season of 2014.	**5 stable or near stable climate-resilient varieties developed** [1] **by farmers** • 18 stable or near stable climate-resilient varieties developed by farmers • Among the 30 potential climate-resilient segregating lines from FCRI selected in the 2014 spring crop season, FFS farmers continued selecting 12 promising lines. Especially, 3 stable pure lines developed by farmers in the F8 generation. Named by farmer they are as follows: TV2 (Tan Vinh commune); AT2 (Bao Ai commune) and One number TL (Tu Ly commune). • All three above lines were selected in accordance with the objectives of drought tolerance, short growth duration, pest-disease resistance and high quality when cooked in mind. The first line of TL variety in Tu Ly commune had a good tolerance to damaging cold in particular.

YEAR 1 T0-T2 (Oct 2012 – Sep 2013)	YEAR 2 T3 – T5 (Oct 2103 – Sep 2014)	YEAR 3 T6-T8 (Oct 2014 – Sep 2015)
Increased reference to women's role in Farmers Rights and Right to Food (seed selection criteria of women considered in the FFS). • Characteristics of selected/bred varieties reflect the selection criteria of women: - Good eating quality; tasty - High yield; - Less labor intensive; - Resistant to drought, flood, salinity, pests and diseases.	**10% Increase in crop diversity** (genetic and crop level) at the farm. • 22 varieties were selected and planted by farmers in 2014 spring cropping season, of which 12 are from FCRI, 7 are modern varieties from seed companies and other sources, 2 are traditional varieties, and 1 farmer-bred variety. **At least 2 crosses** developed by women vis-à-vis men**.** • 1 cross (BC15/Xich xac nhuyen) was developed by women in 2014 spring crop.	**10% increase in diversity [2] (genetic and crop level) on the farm.** • 50% of farmer varieties of seeds were distributed/exchanged by women farmers at the community level (ecosystem level). • 49 new rice varieties were tested in 19 FFS sites. 25 of them were provided by FCRI, 24 by others such as the farmers themselves, the seed companies and other research institutes. • 18 stable varieties were selected and grown on a large scale by the farmers in the 2015 spring crop season. 13 of them were FCRI's. Most of the rice varieties selected had the capability to resist the abnormal cultivation conditions including drought, salinity, damaging cold, pests and diseases and lodging, and had short growth durations and were able to be cultivated in two crop seasons per year. • 9 local rice varieties (sticky Lech, local sticky, Tan Do, Tan Vang, Boong Trang, Seng Cu, Chiem Huong, Khau Nam Xit and KD18 varieties) which have a high quality when cook and a high level of adaptability to the extreme local weather conditions were restored and their given field area was expanded. • 6 cross breeds (now at F1-F4) were developed by women: - 1 cross (BC15/Xich xac nhuyen) (Hoa Binh); - 1 cross (CH21 x GL201) developed Bao Ai, Yen Bai (now in F4); - 1 cross (TL6 x GL107) developed in Yen Binh, Yen Bai (now in F3); - 3 crosses (Chiem Huong x GL105, Chiem Huong x GL159, Chiem Huong x KD18) in Bach Ha, Yen Bai (now in F1).

2. Food Security Milestones

The premise in this output is that food security is highly dependent on seed security and policy support.

- Capacity → Improved seed → Increased productivity → Increased empowerment → Food security
- FFS → Seed system → Increased productivity → Increased empowerment → Food security

YEAR 1 T0-T2 (Oct 2012 –Sep 2013)	YEAR 2 T3 – T5 (Oct 2103 – Sep 2014)	YEAR 3 T6-T8 (Oct 2014 – Sep 2015)
10 FFS/ training organized (**60%** women participated). • 11 new FFS with an average 61% women	**6 new FFS (for the whole of Year2) with 60% women; 10 follow up field studies.** • 10 new FFSs, 5 in spring 2014 and 5 in summer 2014, with average of 79% women; and 25 follow up field studies sites (10 in spring 2014 and 15 in summer 2014), with 86% women.	**6 new FFS with 60% women; 15 follow up field studies** • 19 follow-up field studies with 83.68% of them were women.
20% of IPs and Small Landholder Farmers in the Programme areas testing farming practices adapted for CC (with **60%** women participation). • More than 80% of the FFS-trained farmers are applying the CC farming practices – SRI and IPM techniques.	**20%** Adaptation strategies are implemented. • In addition to the previous year's 80% of the FFS-trained farmers adopting climate change adaptation strategies, a group of 7 FFS-trained farmers In Lao Cai Province was formed with the aim of producing seeds, and guiding interested neighboring farmers the techniques in applying the SRI principles. • In Lao Cai, 27 households applied SRI in an aggregate 28,490 m2 rice field; in Yen Bai, 91 households in 69.630 m2; in Hoa Binh, 75.878 m2; and in Son La, 32 households. **20% Improved access** to quality seeds.	30% of households in the village with improved food security • Measures: - lesser lean months - decreased demand for food from communal food basket. • Since participating in FFS, the households have shifted to the SRI cultivation method. In some of the areas where the locals still grow the local rice varieties, the FFS participants have increased the cultivation area and applied the new techniques of rehabilitation to assure seed quality. For the field areas where cultivation faces certain difficulties, the hybrid rice varieties have been replaced with new purebred rice varieties that have good drought resistance as well as resistance to salinity and lodging. • The statistics from the final assessment completed by PPSD in 5 provinces show that: - When employing the SRI method and independently saving or exchanging seeds, the input costs reduce by 10 – 20%. - The average productivity in-

YEAR 1 T0-T2 (Oct 2012 –Sep 2013)	YEAR 2 T3 – T5 (Oct 2103 – Sep 2014)	YEAR 3 T6-T8 (Oct 2014 – Sep 2015)
	• 100% of the FFS-trained farmers have access to good seeds.	creased by 10 – 27.9% in the households employing the techniques. - For the households who produce grain, the income increased by 10% to 412%. For those who produced seed for selling, this number was even more impressive and came in at 432% (Tan Vinh variety). - In Thanh Hoa province, since the local farmers still employed the conventional methods of hybrid rice cultivation their investment level was high. As a result, rice production suffered losses. When FFS farmers apply SRI and used new varieties they reduced losses by 92%. - In the Khanh Yen Thuong commune and the Ta Chai commune, the length of the period of rice shortage ranged from 4 days to 17 weeks. 90% of the interviewed households faced this issue. Specifically, in the Khanh Yen Thuong commune, the farmers suffered rice shortage an average of 12 to 17 weeks before the Programme was implemented. After joining FFS, 85% of the interviewed households in two villages cut the time period of rice shortage down to 0 – 4 weeks and 15% to 8 weeks. - In the Ban Xen village, Muong Khuong district, while 100% of the interviewed households had sufficient amounts of rice the whole year before the implementation of the Programme, their profit increased by 43% after taking part in the Programme and therefore improved their incomes. - In Bach Ha commune and Bao Ai commune in Yen Binh district, 100% of the interviewed households experienced lack of rice for consumption for 2 – 8 weeks before the Programme implementation. 100% of them did not have to purchase rice after joining FFS. Also, most of the households saved

YEAR 1 T0-T2 (Oct 2012 –Sep 2013)	YEAR 2 T3 – T5 (Oct 2103 – Sep 2014)	YEAR 3 T6-T8 (Oct 2014 – Sep 2015)
		seeds or exchanged seeds with other FFS participants in order to shift from growing hybrid rice varieties (100%) to purebred varieties. - In Trieu Thanh commune, Thanh Hoa province, 100% of the interviewed households had insufficient quantities of rice for consumption for 4 – 13 weeks before the Programme. The time period of rice shortage was reduced to 0 – 8 weeks after joining the Programme. Most of the FFS participants planted the seeds that were produced in FFS. - In Da Loc commune, Thanh Hoa province, 60% of the interviewees reported having rice shortage for 1 – 12 weeks before the Programme implementation whereas 100% of them were able to solve this issue after joining the Programme. - In Hoa Binh province, 75% of the interviewed FFS participants had lacked rice for consumption before the implementation of the Programme while 72.9% of them had enough rice after. For Tan My commune, Lac Son district in particular, the time period of rice shortage before and after joining the Programme was 3 – 17 weeks and 0 – 6 weeks respectively. In Hoa Binh province, the farmers primarily grew the purebred rice varieties and applied the SRI method to increase the productivity. • The total field area where the SRI method was employed in the 2015 spring crop season: - Lao Cai province: 36 hectares/3 sites. Muong Khuong district, where Seng Cu rice is produced, had the highest level of application with 20 hectares. - Hoa Binh province: 10.6 hectares - Yen Bai province: 10 hectares/ 6 FFS sites - Thanh Hoa province: 3,2 hectares/3 FFS sites - Son La province: 6 hectares/ 4 FFS sites.

YEAR 1 T0-T2 (Oct 2012 –Sep 2013)	YEAR 2 T3 – T5 (Oct 2103 – Sep 2014)	YEAR 3 T6-T8 (Oct 2014 – Sep 2015)
		20% Increased nutrition through barter/seed exchanges - According to the baseline survey, the hybrid rice varieties planted in the localities were primarily for consumption in poor households who had relatively less land area. In addition to this, the selling price of hybrid rice varieties' was lower than the purebred varieties'. The farmers usually eat the purebred rice with high quality such as the local sticky rice, Seng Cu, Khau Nam Xit, local Deo, BC15, Huong Thom and Bac Thom varieties. The local varieties, however, are normally degenerated and therefore have low yields. Meanwhile, the modern purebred varieties that have high quality are grown in good land areas. As a result, the farmers have to purchase rice for consumption while their own produced rice goes up for sale. - After joining the FFS, many degenerated local rice varieties were restored and exchanged. The new purebred rice varieties with high quality and good resistance to drought and salinity were also selected to replace the hybrid rice varieties. There was a change in the density of rice varieties by reducing the hybrid rice area and increasing the high-quality purebred rice area in 19 FFS sites. This helped the participants secure food tailored to their families' tastes. Moreover, the benefit from participating in the rice seed production for sale or exchange in Tan Vinh and Tu Ly (Hoa Binh province), Yen Hop and Bao Ai (Yen Bai province), Da Loc (Thanh Hoa province) and Chieng Coi (Son La province) or rice production for trade in Ban Xen – Muong Khuong improved the households' incomes and therefore contributed to improved quality of their meals.
50% of women prefer-	**10% Improved yield and**	

YEAR 1 T0-T2 (Oct 2012 –Sep 2013)	YEAR 2 T3 – T5 (Oct 2103 – Sep 2014)	YEAR 3 T6-T8 (Oct 2014 – Sep 2015)
ences considered in farm testing. • Almost all of women's preferences are considered in breeding/ selection objectives for FFS trials	**income from rice.** • The adoption of SRI techniques and new varieties introduced through the FFS enabled farmers to increase average yield by 7-24% per hectare and reduce amount of seeds used for planting by 40-60%, the amount of fertilizer by 30%, and the use of pesticides. Thus, their income has increased by 10-30%. Farmers now have more choices of varieties to grow. Farmers in Thanh Hoa, Son La, Hoa Binh started to replace some popular varieties (KD18, Nhi Uu 838) that don't produce tasty cooked rice with purebred varieties with high yields and high-quality grains such as M2, GL159, MD1. Under SRI, Seng Cu variety became less susceptible to rice blast disease. With SRI, farmers in Muong Khuong District in Lao Cai Province have had a bumper crop.	
3 women-sensitive technologies tested. • Plant breeding techniques, (e.g. Crossing: emasculation and pollination;) SRI techniques (e.g., seed germination in plastic containers; less frequent irrigation); IPM techniques (e.g. minimal use of chemical spray).	**5** women-sensitive technologies tested. • The whole package of technologies in the FFS is designed to be women-friendly.	• The female farmers were very interested in the techniques of rice variety comparison and rice variety rehabilitation since it would allow them to select the most interesting rice grown in a short period and they could observe the result. • The technique of segregating line selection and the technique of hybridization required the farmers to have passion and time as well. The female farmers with young children or poor economic conditions normally

YEAR 1	YEAR 2	YEAR 3
T0-T2 (Oct 2012 –Sep 2013)	**T3 – T5 (Oct 2103 – Sep 2014)**	**T6-T8 (Oct 2014 – Sep 2015)**
		paid little attention to these two techniques. • IPM and SRI generated interest from female farmers, as they were the people who frequently visited and took care of the paddy fields.

3. Policy Engagement Milestones

YEAR 1	YEAR 2	YEAR 3
T0-T2 (Oct 2012 –Sep 2013)	**T3 – T4 (Oct 2103 – May 2014)**	**T6-T8 (Oct 2014 – Sep 2015)**
1 policy area identified through FFS	**At least 1 policy area** identified through FFS • Through the FFS, the policy circular No 35/2008/QD-BNN on "Production Management of Farm Households' Plant Varieties" was brought out of the shelf. This policy was an output of the CBDC-BUCAP Programme. However, it was not actually funded and implemented. The Programme aims to set an IEC campaign and advocacy for its enforcement.	**At least 1 policy area** identified through FFS • After 3 years of Programme implementation, the needs of the farmers include the establishment of rice seed production groups, expansion of the promotion activities and of the marketability to other villages in the district. • Although the Decision No. 35/2008/QD-BNN allowed the farmers to exchange rice seeds within the district, the farmers need more specific supporting policies like: - Official documents recognizing the legality of the rice seed production groups; support in the promotion of the products; distribution of rice seeds and support on the inputs required in rice production in localities by the communal People's Committee, The District People's Committee and The Provincial People's Committee. - Supporting policies for research groups to sustain the research activities and the results and gains of hybridization, selection of segregating lines and rehabilitation. - Organize training courses in localities to increase the number of farmers who have access to the knowledge of PGR.
Training needs assessment of Programme team	**10 FFS advocates trained** in policy advocacy (modules)	**20 FFS advocates trained** in policy advocacy

YEAR 1 T0-T2 (Oct 2012 –Sep 2013)	YEAR 2 T3 – T4 (Oct 2103 – May 2014)	YEAR 3 T6-T8 (Oct 2014 – Sep 2015)
and technicians for training on policy advocacy. • The need for a policy advocacy training for the Programme team has been established.	• The policy advocacy training was designed to be an integral part of the existing FFS component modules. Farmers with potentials as spokespersons will be selected for further coaching and mentoring**.**	• Key farmers from each province who are potential advocates are currently being developed. Their exposure and direct engagement with policy makers in the last FTPC served as a good training opportunity for them
1 Policy brief on evidence-based adaptation on local perception CC. • Policy study was initiated, which will serve as the basis for the policy brief.		1st draft completed
1 Policy brief on women's role on the market (barter, seeds market). • Initial deskwork on gender review was done, from which the policy brief will be developed.	National Policy discussion (with community involvement). Facilitate farmer-driven and inclusive global policy agenda formulation. • 1 National Consultation Workshop on PGR CDU as a climate change adaptation strategy, held in December 2013. This was participated in by 10 farmer-representatives, and government policy makers/decision-makers in agriculture and climate change sectors. This gave way for farmers to share what they are doing on the ground and articulate their concerns, especially on effects of climate change.	National Policy discussion (with community involvement) • Women are directly involved in seed exchange and barter activities within their villages and communes. The selling of seeds however remains to be bound by current state laws that limit the sales or commercial trading of seeds outside of communes to commercial seeds or those certified as national varieties. This issue has been repeatedly raised during Programme activities like FFD's, assessments and FTPC's. While provincial level authorities understand the farmers and are inclined to craft the enabling policy(ies) at their own levels, they are also resigned to the fact that they can only do as much as the national laws allow.
Biocultural protocol focus defined. • The focus of study is seed exchange. The rationale behind is that seed exchange is a dying traditional practice; its restoration would enhance biodiversity. This study	Bio-cultural protocol outline and testing. • Documentation study of seed exchange to be done in November 2014.	• Documentation report on seed exchange done

YEAR 1 T0-T2 (Oct 2012 –Sep 2013)	YEAR 2 T3 – T4 (Oct 2103 – May 2014)	YEAR 3 T6-T8 (Oct 2014 – Sep 2015)
will include documentation of their existing seed exchange practices and development of the desired community protocol on seed exchange within and outside the community, and their protocols on access and benefits sharing from their PGR.		
FFS policy analysis on seeds, UPOV, CC (Right to Food – Human Right) – **at least 1 related policy analyzed** • Seed industry analysis was done first as input to the policy work.	Policy analysis on National Seed Law. • Ongoing policy study on seed certification under the National Seed Law and its implications to the farmer-bred varieties and farmers' rights.	FFS policy analysis on seeds, UPOV, CC (Right to Food – Human Right) – **1 relevant policy analyzed**
1 Gender-sensitive learning modules for FFS (PGR) developed and tested. • The SRI and IPM modules have been reviewed and fitted for women's needs. For example, both young and old women farmers find the use of light-weight materials or plastic containers as trays for seed germination, as more convenient to do, time saving, and does not cause back pain, rather than seedbed preparation.	Gender-sensitive learning modules for FFS (PGR) modified/ refined. • Gender-sensitivity is being integrated in each module in the existing FFS toolkit.	Gender-sensitive learning modules for FFS (PGR) finalized and published; • Community Assessment of Programme concept and tools • The interested PGR techniques varied across the groups depending on the characteristics and needs of each group of different communities and gender representation. The contents of the modules in the FFS' were also tailored, especially in the following 2 sets of research: • Selection of segregating lines: use both mass selection and pedigree selection or Bulk selection. • Rehabilitation: whether to apply the positive selection or negative selection depending on the farmers' needs.

Zimbabwe

Seed Security / PGR milestones:

3 YEAR milestones	Progress	Analysis/Explanation
5800 of households (men and women) trained and practicing PGR management on-farm *	6720 farming households (30% men and 60% women) were trained and practicing PGR management on-farm.	Farmers reached through seed fairs, FFSs, trainings and field days. 6720 Programmebeneficiaries are registered and electronic data bases were produced.
20% increased availability of improved seed among smallholder farmers produce at market and/or barter *	8 tonnes of pearl millet seed sold out of the 30 tonnes quality seed that was produced by the Tsholotsho seed Producers Association, and 13 tonnes of soya beans sold among local farmer beneficiaries in Goromonzi district.	Farmers in Programmedistricts are now accessing new quality seed as a result of seed production initiatives, community seed banking activities and seed exchanges during seed fairs thus increasing their crop diversity and yields. However due to transport costs, the on-farm produced seed in Tsholotsho cannot be transported to other districts where farmers have made requests for the seed because of challenges with the Zimbabwean legal system Farmer produced seed can only be sold within a radius of 10 - 20 km from the point of production and not beyond. In a few instances, CTDT staff moved the seed on the pretext of delivering it to new sites as seed for trial purposes.
Markets established in the 3 drought prone districts of Mudzi, Mutoko and Rushinga to sell the on-farm produced seed *	Two (2) on-farm seed production entities were linked with markets in drought stricken areas.	Linkages were established with buyers of soya beans and an agreement was reached to contract local farmer producers. However the Programmeis still facing challenges to link e.g. pearl millet producers to markets in other districts. Efforts to do so where dampened because of the Zimbabwean legal system as explained above and also due to the fact that the Tsholotsho Seed Producers only harvested 16 tonnes in year 1 and 30 tonnes in year 2 and were only willing to sell less than 10 tons because of food insecurity challenges associated with climate change induced droughts in their district, hence the decision to convert the seed to grain to meet their food security challenges

3 YEAR milestones	Progress	Analysis/Explanation
Establish 5 seed production groups in Tsholotsho (3 groups) and Uzumba Maramba Pfungwe (2 groups) districts of Zimbabwe	2 pilot seed production groups were established in trimester T0 and none were established during this reporting period. The outstanding 2 groups were not established because of challenges related to marketing of the harvested seed.	Two on-farm seed production associations in Tsholotsho and one in UMP drafted their constitutions. The other two are still to finalize their draft constitutions. One umbrella Seed Producers Association which was to be established as a representative body to help link farmers with high value markets could not be established. Efforts to formally register the seed production entities could not be followed up to completion during the Programmeperiod. Plans were put on hold pending the finalization of the Pillar 2 activities of the SIDA Programmeas the organization wanted to synchronise the two processes.
Capacities of 900 farmers on seed production developed (Zimbabwe)	Capacities of 523 farmers on seed production developed in Tsholotsho and Goromonzi only during the T1 programming period. The remaining farmers were trained in Year 3 but they could not harvest seed from their plots due to the climate change induced droughts experienced during the 2014=2015 agricultural season	523 farmers were trained on general seed production modalities. Those that were supposed to be trained in UMP (377 farmers) only received the training in Year 3 of Programmeimplementation. However their seed production plots were seriously affected by the mid-season droughts that hit the district during the second half of the 2014-2015 agricultural season. No seed was harvested from these plots resulting in most of the trained farmers being demoralized in taking up seed production activities.
A total of 15 potentially climate resilient seed varieties are identified by farmers and shared through the Programme's scaling up process.	Farmers and breeders from Matopos Research Institute identified 8 advanced lines of sorghum and 6 advanced lines of pearl millet which were evaluated during the 3 years of Programme implementation. In addition, 2 varieties each of groundnuts and bambara nuts, 2 of rice (Nerica rice) were introduced within the FFS fields for evaluation and in instances	Farmers will continue observing the performance of the 16 crop varieties in the crop diversity plots. (Cowpeas, bambara ground nuts, pearl millet, sorghum and maize) in FFS and this is an on-going activity. Performance evaluation of 5 sorghum and 5 pearl millet advanced lines will be done in Year 2. Using an evaluation form with

3 YEAR milestones	Progress	Analysis/Explanation
	where farmers were happy with their performances, seed multiplication activities were initiated, FFSs continued to host crop diversity plots with crop varieties that were jointly identified by farmers and researchers during the scientist-farmer consultative meetings.	parameters which included days to emergence, flowering and physiological maturity; pest and diseases resistance; cob/grain size; easy to process and taste. Other PRA tools such as matrix ranking were used during the evaluation
100 women farmers take up leadership positions in FFS groups and take increased role in Farmers Rights and Right to Food debates at the local and national levels.	63% of leadership positions in FFSs are occupied by women. In addition, the majority of members (7 out of 10) of the FFS groups are women.	CTDT and Agritex officers trained lead farmers on leadership skills. The majority of FFS participants in all the districts are women.

Food Security Milestones:

3 YEAR milestones	Progress to date	Analysis/Explanation
Twelve FFSs established and 10 training sessions organized with 60% of the participants being women	29 more FFS groups were established in Year 2 with an additional 26 being established in year 3. 16 seed fairs were held during the Programmeimplementation period. Farmers, academics from universities and policy makers (members of parliament and senators) attended these seed fairs.	A total of 65 FFS groups are now functional across the Programmesites. 72% of the members are women. Discussions in FFSs focused on traditional climate change adaptation strategies which could be tried to increase crop diversity among the beneficiary farmers.
Fifty (50) percent of the targeted beneficiaries (60% of them being women) testing farming practices which are adapted for climate change. 12 potentially climate resilient seed varieties identified by farmers and introduced into their farming systems.	A total of 580 farmers in FFSs discussed the use of other better farming practices like water harvesting techniques that include infiltration pits, *fanya juus,* conservation agriculture, agro-forestry in the coming season The collaboration with government research institutions has resulted in 10 more varieties of sorghum (5), pearl millets (5) to give a total of 18 varieties (including 8 introduced during Year 2 of Programmeimplementation) which are	CTDT, Agritex staff and lead farmers conducted refresher trainings on conservation agriculture, infiltration pits and farmers started preparing their fields ahead of the on-set of the rainy season. Water harvesting holes will be made with the supervision of CTDT and government extension personnel The Programmewas able to introduce more potentially climate resilient varieties than the 12 that were targeted at the beginning of the Programme.

3 YEAR milestones	Progress to date	Analysis/Explanation
	potentially resilient to CC being introduced for evaluation by farmers in the 65 FFSs that have been established within the Programmesites.. The total number of varieties introduced throughout the Programmeare over 25 and these came from the Government's Crop Breeding Institute, Seed companies and the national gene-bank, CIMMTY and ICRISAT	This was made possibly because of CTDT's collaborative linkages with the Government's Crop Breeding Institute, ICRISAT, CIMMTY and seed companies. However the introduction of more climate resilient crop varieties did not significantly contribute to food security among Programmebeneficiaries because of the limited quantities of seed that was availed from these institutions. Programmebeneficiaries have now multiplied the seed and shared it among themselves hence improved crop production and food security are anticipated in the coming year or two.
Women preferences considered in farm testing	Legumes such as groundnuts, cowpeas, bambara groundnuts which are used as relish to be considered in testing CC resilient varieties	The Crop Breeding institute gave the 65 FFSs 3 improved varieties of groundnuts. More varieties of legumes will be included in the diversity plots
2 women – sensitive technologies in the processing of small grains such as sorghum and pearl millet tested in Tsholotsho, Chiredzi and UMP	No new technology was tested during the reporting period. The traditional pestle and mortar method was used to process small grains during evaluation sessions	Programmestaff would consider following up on these technologies as the Programmeprogresses.
The Food security situation in the Programmesites is improved by Year 3.		Overall, farmers especially those who actively participated in FFS groups, seed and food fairs, training sessions of how to practice conservation agriculture and field days that were hosted within the Programmesites are food secure. This is despite the fact that farmers experienced climate change induced droughts in addition to the deteriorating economic situation in the country.

Policy Engagement milestones:

YEAR 1	Progress to date (Jun to September 2015)	Analysis/Explanation
One policy brief on evidenced-based adaptation on local perception CC ready for presentation at GB5 of the International Treaty of Plant genetic Resources for Food and Agriculture (ITPGRFA)	CTDT provided inputs into a policy brief that was published by Oxfam Novib and presented to stakeholders during the fifth Governing Body meeting of the ITPGRFA.	The policy brief was published on the basis of evidence based adaptation strategies to CC using local farmer perceptions.
Policy brief on women's role on the market (barter, seeds market)	No policy brief on women's roles on marketing of seed was produced	No policy brief on women's roles on marketing of CC resilient produce was produced during the reporting period.
Bio-cultural protocol (define focus, y_1)	No bio-cultural protocol produced in this trimester	CTDT has not done any work related to the Bio-cultural protocol
600 FFS advocates trained in policy advocacy (modules) Y_1 FFS policy analysis on seeds, UPOV, CC (RtF – HR) 20% Y_1	200 advocates were trained during Year 3 of Programmeimplementation. However a total of 200 farmer advocates were trained on Farmers' Rights, Right to Food and a general introduction to Zimbabwe's seed laws during Year 3 of Programmeimplementation	200 farmer advocates were trained on policy issues relating to Right to Food, Farmers' Rights, and Zimbabwe's seed laws, implications of signing the UPOV convention and the SADC Seed Harmonization and ARIPO Protocols. However because of the political situation in Zimbabwe, farmers are not comfortable engaging policy makers to address some of their concerns because doing so at local levels will be construed as joining the opposition parties. There is need therefore to further raise awareness among the policy makers themselves so that they view these as positive. Awareness raising meetings were also held for over 867 farmers, government extension officers, rural district council officers, Environmental Management Agency officers, traditional leaders and ward councilors in Programmesites on RtF, Farmers' rights to seed

YEAR 1	Progress to date (Jun to September 2015)	Analysis/Explanation
		for agricultural production
Gender sensitive learning modules for FFS (PGR) Y_1 - test	No gender sensitive learning module for FFS groups produced	A training of trainers' workshop was conducted on Participatory Plant Breeding and FFSs. A field training guide is currently being produced.

For more information, or to comment on this publication, please email gigi.manicad@oxfamnovib.nl

Published by Oxfam Novib, June 2016.

Oxfam Novib
P.O. Box 30919
2500 GX The Hague
The Netherlands

T +31 (0) 70 3421621
info@oxfamnovib.nl
www.oxfamnovib.nl