

## Annex 1 - 8<sup>th</sup> Progress Report – Knowledge Gap Assessment

### Ada

Identified knowledge gap*	Knowledge gap target**	Identification process/tools***
Apiculture scaling out/up	Extension agents, input suppliers, Unions, farmers	<b>Observation during Apiculture scaling out/up workshop</b>
Chickpea scaling out/up	Extension agents, researchers, farmers, Unions	<b>Observation during chickpea innovation scaling out/up and experience sharing workshop</b>
Women right in land ownership and access for utilization	Extension agents, administration, decision and policy makers at different level in Oromia Region	<b>Observation during an MSc student seminar presentation</b>
Women participation in apiary	Women farmers	<b>Observation during experience sharing visit to model apiary women farmer</b>
Benefit and use of IT by farmers and DAs at village level	Youth in rural area and DAs	<b>Observation during handover of FTC IT equipments</b>
Integration and demonstration of modern agricultural practices	Extension agents, donors, farmers and NGOs	<b>Observation during a visit of Canadian Parliamentary Secretary for foreign affairs</b>
Establish seed multiplication specializing farmers	Extension, research, NGOs, Union, ESE, farmers	During seed multiplication training, Chickpea scaling out/up
The importance of seed dressing and use of bio-fertilizer	Extension agents and farmers	During training of the application of bio-fertilizer and seed dressing
Establishing forage seed producing farmers	Extension agent, farmers, research	During joint IPMS-IFAD forage roundtable meeting
Linking forage seed producing farmers with private company in contract agreement	Extension, farmer, private traders, NGOs	During joint IPMS-IFAD forage roundtable meeting

## Alaba

Identified knowledge gap*	Knowledge gap target	Identification/processes/tools
Dairy	Urban dairy group farmers (Zala PA, 10 HH, one female)	Meeting, discussion, trainings, forage provision
	Rural dairy group Guba Sheraro PA (30HH, all male )	Survey
Apiculture	Apiculture farmers scale up (2 PAs, Alem Tenna, Guba Sheraro PA, 44 HH (21 women)	Trainings, discussion, Bee forage provision and demonstration
	Wanja and Galato PA apiculture farmers , 17 HH (All male) bee forage	Demonstration Bee forage provision
Sheep and goat	Farmers in Hulegeba Kukie PA and Asore PA	Credit provision, forage development
Teff seed multiplication	Guba Sheraro and Hulegeba Kukie , 111 HH (5 female)	Farmers visit
Input supply service (Private crop protection service, Input shop , forage shop, private nursery, Animal feed shop, Paravets, Colony multiplication )	Farmers, Farmers Union, Traders in various PAs	Credit material provision, Monitoring of service, Trainings
Poultry development	5 PAs, 80 HH ( 50% female)	Discussion, credit provision
FTC	2 FTCs (Alem Tenna and Andgena Ansha) for farming community in the PAs.	Meetings, Educational Material supply (Books, Shelves, Video CD, CD rack, Generators , TV stand TV and DVD player)
Pepper and Haricot Bean Seed bank	64 HH for Haricot Bean in 4 PAs(Andgena Chorko, Hulegeba Kukie, Uletegna Choroko and Galto PAs) For pepper seed Bank 7 farmers 3 PAs (Yambo, Ansha and Galto)	Training , Meeting Demonstration Seed supply

## Alamata

Identified knowledge gap*	Knowledge gap target**	Identification process/tools***
Swampy area reclamation (C-class)	Farmers	Observation & discussion
Bee forage development	Farmers	Discussion with farmers
Private input suppliers	Private sector	Discussion with farmers
Artificial honey comb	Farmers, private sector	Observation
Bee colony splitting	Farmers	Discussion with farmers
Fruit seedling grafting and nursery management	Private sector	Observation and discussion
Agricultural business entrepreneurship	Farmers, private sector	Observation and discussion

## Atsbi

Identified knowledge gap*	Knowledge gap target	Identification process/tools
Knowledge gap in colony splitting and management	Beekeepers and DAs	Workshops/meetings and field visits
Knowledge gap in colony transfer and colony-nectar flow management	Beekeepers and DAs	Workshops/meetings and field visits
Gap in knowledge and institutional set up in further expansion of bee forage sources and beekeeping input supply	Beekeepers, DAs and woreda experts and decision makers at PA and woreda levels	Workshops/meetings and field visits
Gap in quality honey handling during harvesting, processing, storage and marketing	Beekeepers and DAs	Honey market visits, workshops/meetings
Gap in irrigated vegetable water management, pests and quality handling	Farmers, DAs and experts	Field days, workshops and meetings
Gap in balancing the synergy between irrigated vegetable pesticide spray and beekeeping	Farmers, DAs, woreda experts and decision makers as well as zonal and regional relevant experts and decision makers	Workshops and formal complains and arguments filed
Gap in community empowerment and knowledge to adopt the cut and carry system of animal feeding for improved fattening and dairy production	Woreda and PA decision makers, experts, DAs and the community	Field days, workshops and meetings
Gap in improved heifer and poultry production	Private or farmers	Meetings and formal request
Gap in market information collection (MIC) within and outside the woreda and market information dissemination (MID) within the PAs	MIC: Four market places within the woreda and four outside the woreda MID: All 16 PAs	Workshops/requests
Gap in establishment of effective market linkage	Producers of market oriented commodities and traders	Workshops/meetings and request

## Bure

Identified knowledge gap*	Knowledge gap target	Identification process
Lack of knowledge to produce wheat using conservation tillage technology	Farmers and DAs	Community discussion and field visit. Poor framers rent their farmland since they do not have ox
Lack of skill on fruit grafting and fruit tree management	Farmers & DAs	Field visit and community discussion. All fruit trees are not pruned and not propagated by vegetative methods
Lack of knowledge to multiply bee colony by queen rearing	Farmers, DAs & experts	Field visit and community discussion. Most beekeepers buy colony from the market for their new beehive
Lack of experience to improve the feed value of wheat straw by urea treatment	Farmers	Field visit and discussion with farmers. Most farmer burns wheat straw on the field.
Lack of knowledge to prepare balanced diet from locally available feed resources for animal fattening	Farmers, DAs and experts	Field observation and discussion with farmers. Farmers feed their animal without considering its nutritive value.
Lack of knowledge to prepare balanced poultry feed from locally available materials	Farmers, DAs & experts	Field observation and discussion with farmers. Farmers did not provide feed to their chicken. On the other hand, some purchase poultry feed while they can prepare with minimum cost
Lack of awareness on the availability of late blight resistant and high yielding potato varieties	Farmers & DAs	Field visit and discussion with farmers and DAs. All potato fields planted with local varieties. Farmers follow dry planting to escape the late blight problem
Lack of know how to grow high value crops on irrigated farmlands in the highlands	Farmers & DAs	Field visit and discussion with farmers and DAs. Farmers did not use their irrigable farm land for the production of high value crops like apple in the highlands.
Lack of experience to apply different management practices following fruit crops phenology	Farmers, DAs & experts	Discussion with experts and DAs. Farmers, DAs and experts did not know the ideal time for example for grafting, fertilizer application, pruning, etc

## Dale

Identified knowledge gap*	Knowledge gap target	Identification tool
Gender and development	Woreda level SMS, DAS	Interviews for baseline, discussion
Concepts of development	Woreda level SMS, DAS	Discussion
Poultry production & management for the landless urban dwellers	Urban chicken producers	Demand from urban farmers
Milk hygiene and processing	DAs & Member of cooperative and private farmers	Discussion with farmers
Bee keeping and honey & wax processing	Farmers & DAs	Discussions and personal communication
Computer literacy	Woreda staff & DAs at the four FTCs	Demand from staff

## Fogera

Identified knowledge gap*	Knowledge gap target	Identification process/tools
1. Market Oriented Agriculture production system skill (farmers are producing based on their interest not on market need)	Farmers (producers)	Discussions
2. Effective utilization Rice straw through urea treatment to improve beef and dairy commodity development skill	Farmers	During farmers field day discussion and feedback
3. Knowledge on motor outboard engine operation and service	Fishermen group	Discussion
4. Upland rice production skill in non-paddy and previously non-rice growing kebeles	Farmers	Discussion
5. Honey colony multiplication through artificial swarming /colony splitting/ skill	Farmers who keep bees	Informal survey
6. Impact of Hygrophila (Amicala) on pasture land skill	Farmers & Woreda Experts	Discussion
7. Different improved Forage species to maximize production of pasture through over sowing	Farmers	Meetings
8. Zero grazing to improve pasture production	Farmers	Discussion
9. Frequency of cutting to maximize pasture yield and improve palatability and nutritive value	Farmers	Discussion during student research paper presentation seminar
10. Computer literacy	Woreda staff & DAs at the four FTCs	Demand from staff

## Metema

Identified knowledge gap*	Knowledge gap target**	Identification process/tools***
Lack of adequate technical skill on detection of estrous period cow palpation	ARARI research assistances and woreda artificial inseminators	The gap was identified after discussions with partners including ARARI researchers
Lack of adequate improved fruit and vegetables practices	Farmers, DAs and woreda level experts	The gap was identified through farmers orchard visit and farmers request on improved practices
Lack of awareness on improved cotton planting technique and its benefit	Farmers	The gap was identified through past experiences on traditional planting method
Improved rice seed production	farmers	The gap was identified by ARARI staff after conducting discussion with farmers and woreda office
Lack of awareness on integrated pest management techniques and health and safety	Woreda staff, DAs and farmers	The gap was identified by IPMS after attending on value chain approach in cotton development workshop organized by ILO



## Miesso

Identified knowledge gap*	Knowledge gap target**	Identification process/tools***
<i>Entrepreneurial</i> skills development	OoPRD, cooperative desk and Market groups	Staff professional discipline composition record and discussion with the representatives
Book Keeping, Material and fund management	OoPRD, cooperative desk Market groups, input suppliers and individual market operators	Observation and report on support from partners offices
Networking, linkage building and Partnership management	OoPRD, private sector and other public offices	Personal observation and various indicators elucidating gaps
Mineral Lick preparation locally	Market groups, FTC, input suppliers and livestock enterprise operators	Practical experience and problems mapping
Participatory monitoring and impact assessment	OoPRD	Observation on various activities
Tropical Fruit Disease and pest control and management	OoPRD, individuals, and farmers	Assessment on skill gaps
Cattle/Small ruminant breeding and reproduction management	OoPRD, pastoralists, agro pastoralists, and farmers	Assessment on skill gaps
#Agricultural Information (Data) entry and management ## Web page designing and content management	OoPRD, Cooperative desk, women affairs office and HAPCO	Assessment on skill gaps
International safety /Phytosanitary procedures in live animal prod	Market agents, market groups and OoPRD	Assessment on skills gaps
# Managing and utilizing Sorghum/short varieties/ Stover poisoning /including cyanide poisoning ## Anti –nutritional factors identification and utilization	Farmers, pastoralists, agro pastoralists, market groups and OoPRD	Assessment on skills gaps