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# Contents

Abbreviations and Acronyms	iii
Summary	iv
Introduction	5
Characteristics of the Lead Farmer Model	5
Steps in conducting Lead Farmer Expansion - Farmer-to-Farmer Extension Programs	7
Preparatory	8
Training program	8
Implementation of post-training plan	9
Monitoring and Reporting	9
Support Mechanism	9
Sustainability	10
Annexure 1. Total Number of Lead Farmers trained and handed over to Dzongkhags	11
Annexure 2. List of Lead Farmers as of 2019-20	11
Annexure 3. List of Lead Farmers of 2018-19	14
Annexure 4. List of Lead Farmers of 2017-18	16
Annexure 5. List of Lead Farmers of 2016-17	18
Annexure 6. Format to maintain record of extended farmers by Extension staff	20
Annexure 7. Format to record extended services by Lead Farmers	20
Annexure 8. Samples of Case story write ups on Lead Farmer Expansion	21

# **Abbreviations and Acronyms**

ARDC Agriculture Research and Development Centre

CARLEP Commercial Agriculture and Resilient Livelihood Enhancement Programme

CCAP Climate Change Adaptation Practice

DoA Department of Agriculture

Dzongkhag District

F2F Farmer-to-Farmer

Gewog Sub-district

GE Gewog Extension

IFAD International Fund for Agriculture Development

JICA Japan International Cooperation Agency

LFM Lead Farmer Model

LFs Lead Farmers

MoAF Ministry of Agriculture and Forests

# **Summary**

With the aim to enhance agriculture extension service delivery, ARDC Wengkhar adopted Lead Farmer Model as an effective extension approach under Commercial Agriculture and Resilient Livelihoods Enhancement Programme (CARLEP) funded by the Royal Government of Bhutan and the International Fund for Agriculture Development (IFAD).

In view of this, ARDC Wengkhar has trained 142 lead farmers and handed over to Dzongkhags since 2016-2017 till date - 2019. Each Lead Farmer is required to extend the knowledge and skills acquired from the training to at least 5 to 10 interested farmers in his/ her community facilitated by the Dzongkhag and geog agriculture development plan under CARELP – IFAD Supports.

However, the lack of proper guideline was seen as one of the bottleneck in effectively utilizing the Lead Farmers in farmer-to-farmer extension. Therefore, this guideline is developed for field staff to ensure effective utilization of Lead Farmers and enhance farmer-to-farmer extension by Dzongkhags and geogs as an extension approach to promote farmer to farmer extension.

#### Introduction

In order to enhance extension service delivery especially in situations of limited extension service providers, farmer to farmer extension methodology has been widely used in rural development. The Commercial Agriculture and Resilient Livelihoods Program with funds from the International Fund for Agriculture Development and the Ministry of Agriculture and Forest have been promoting the concepts of Lead Farmer in which a farmer from the locality who can demonstrate and disseminate extension information and farming skills are selected following certain criteria by the local extension staff in consultation with the local administration and potential lead farmers. These undergo a series of training at the Agriculture Research and Development Centre (ARDC) at Wengkhar and develop a lead farmer model of integrated farming. Between 2016 and till date 143 lead farmers ( 20 by SJI) have been trained and demonstration models of integrated farming were established with each of them. These lead farmers have been handed over to the respective Dzongkhags with detail information of the lead farmers as attached in Annexure 1 to 5.

The implementation of CARLEP began using this approach and in the last few years several lead farmers have assisted the geog extension centres and also on their own to shared their skills with other farmers. The project has also started to allocate adequate resources to the Dzongkhags to replicate similar models and begin deployment of the services of the trained farmers thereby initiating a farmer to farmer extension of services aimed to enhancing the effectiveness of the extension services.

The Department of Agriculture has also taken on board outreach and lead farmers concepts to be used as an extension approach in the ongoing 12<sup>th</sup> FYP plan implementation considering the likely effectiveness of farmer to farmer extension in service delivery in our contexts.

Thus in order to ensure consistency and uniformity in the application of this extension approach – here in referred as the 'Lead Farmer expansion', ARDC Wengkhar has developed this guideline for extension staff in the project sites in eastern Bhutan for further replication of lead farmer approach by engaging trained leaders to expand their services and skills to a certain number of other farmers in the remaining part of the project and beyond thereby leaving behind resulting impact from the project.

Respective geogs are also to keep records of the expansion as per the formats attached in Annexure 6 and 7. Sample case stories of lead farmer expansion are also provided in Annexure 8 to help guide extension staff in writing cases of the lead farmer expansion.

#### **Characteristics of the Lead Farmer Model**

Lead Farmer Model is a holistic approach to disseminate farming technologies through structured season-based hands on training and establishment of integrated model farm. Hence, some of the characteristics of this approach are as follows:

#### **Lead Farmer**

Lead Farmer (LF) is a self-motivated and trained individual who is willing to lead other farmers in his or her community through sharing of knowledge and skills within the lead farmer expansion or farmer-to-farmer (F2F) extension program. Refer the list of lead farmers of your locality.

A copy of the lead farmers as of 2019-20 are attached as *Annexure 1*. Extension staff should visit lead farmer demonstration farm of all the lead farmers on the respective geogs and should build a strong linkage with them to reinforce lead farmer model as well as initiating expansion of his or her services.

#### **Extended farmers**

The extended farmers refer to an interested individual or a group of farmers in the community where a lead farmer reside and is/are willing to learn from/take the services of the Lead Farmer. These should be selected by the extension staff.

#### **Training venue**

The integrated farm developed for the Lead Farmer as a part of the lead farmer training should serve as the training venue to expand his or her services to others. This will not only ensure the lead farmer maintain the model to certain standard and keep it last through but will also benefit more farmers to take it as an example for the replication.

#### **Extension Officers**

The local extension staff plays the role of facilitator and back up to the lead farmer in training or replicating the skills and services to others who are also selected under the Lead Farmer Expansion Program.

## The Curriculum

The curriculum should be oriented towards imparting adequate hands on practice training in which the skills acquired by the lead farmers is disseminated to the neighbors in both formal and informal trainings and visits. A structured curriculum based on the needs be prepared by the extension staff to guide the conduct of the training.

## **Training program**

The geog agriculture extension staff should plan out training programs preferably at different seasons and stages of a value chain approach with a training plan as well as a post training program.

#### **Training approach**

The geog agriculture staff and the resource person – Trained Lead Farmer should organize the training in one of or several Lead Farmers demonstration model established by ARDC Wengkhar and the lead farmer. Expanded farmers may opt to reside for few days on the lead farmer's farm as is currently practiced and found to be effective by the Samdrup Jongkhar Initiative (SJI) in expanding the Lead Farmer Model in their program areas.

For instance, if the prioritized farming technology is "training and pruning of fruit trees" and "vegetable cultivation", the facilitator (herein referred to as Extension Officer) provides the required budget and inputs to the Lead Farmer concerned and the extended farmers undergo hands on training on the specified subject using his/her model farm as the training venue. However, the facilitator should provide required guidance whenever necessary.

## Learning materials and resources

The facilitator should assist Lead Farmer concerned in developing required learning materials and resources which should be planned on an annual basis in the respective Annual Work Plan and Budget (AWPB). The lead farmer expansion should cover payment for services to the Lead Farmer resource person as well as plan out resources required for lead farmer expansion into other farmers who are getting trained or expanded with the services from the lead farmer. These materials will mostly be production inputs to replicate the demonstration model and basic tools required for replication.

#### Steps in conducting Lead Farmer Expansion - Farmer-to-Farmer Extension Programs

The main steps in conducting lead farmer expansion are illustrated below:

#### 1. Preparatory: The facilitator (Geog Agriculture Extension staff):

- Identify training needs in their locality in relation to agriculture development.
- -Visit lead farmers farm
- Confirm training subject in consultation with Lead Farmer concerned.
- -Prepare training materials and other arrangements at site
- -Refer AWPB for resources or seek help of DAO or ADAO who should have kept resources
- Identify interested farmers from the community to be trained.
- Inform and plan with the Lead Farmer on the program.
- Mobilize required resources based on the AWPB.
- Arrange required production inputs and other training materials.

#### 2. Training program

- Organize the training at the selected lead farmer's demonstration farm.
- Facilitate the training sharing of lead farmer's experience and skills based on the training plan for topics identified earlier
- Hand over the required production inputs to the Lead Farmer concerned.
- Provide technical guidance whenever necessary.
- Maintain proper records of the farmers trained by a Lead Farmer for effective follow up.
- Develop a proper post-training plan

#### 3. Implementation of post-training plan

- Provide required production inputs, if any.
- Implement post-training plan.
- Provide guidance whenever necessary.

### 4. Monitoring and reporting

- Monitor progress of post-training activity
- Report the progress as a part of the activity completion report
- Document case stories of expansion

## **Preparatory**

As stated above, the Lead Farmer in consultation with the Extension Officer (Facilitator) concerned shall identify pertinent field issues and farmers who are affected by the issues. Likewise, the Facilitator shall mobilize required resources and schedule training for the interested group of farmers based on the AWPB.

## **Training program**

The training of interested farmers by Lead Farmers should be offered on a need basis and context driven. However, some of the key areas on which farmer-to-farmer extension program could be focused are as follows:

- Crop cultivations practices (fruits, vegetables and cereals)
- Plant propagation
- Seed Production
- Protected cultivation technologies
- Sustainable land management
- Soil and Water conservation (traditional practices, improved practices, mulching, rain water harvesting, micro irrigation systems)
- Integrated Pest and Nutrient Management (Preparation of bio pesticides, composting preparation)
- Post Harvest processing and value addition (Agro processing and technologies such as solar drying technology)
- Farm planning and record keeping

## Implementation of post-training plan

The Extension Officer (Facilitator) concerned should facilitate in effective implementation of the post-training plan by the trained farmers (Extended farmers). For instance, if the training is on improved fruit cultivation technique, the facilitator) should provide required production inputs to establish mixed fruit orchard integrated with vegetable cultivation along with proper technical backstopping whenever required.

#### **Monitoring and Reporting**

The Facilitator shall monitor the progress of post-training plan implementation by each extended farmer and report to Agriculture Research and Development Centre (ARDC), Wengkhar and Office of the Programme Management (OPM), Commercial Agriculture and Resilient Livelihoods Enhancement Programme (CARLEP). Record of farmers who attended the training should be maintained as shown in Annexure 2. The services of the lead farmers extended to others ( outside lead farmer trainings) may also be recorded by asking the lead farmers to maintain proper records of services provided and number of farmers to whom he or she has extended their services. Report these data.

## **Support Mechanism**

Each extended farmer can be provided with basic production inputs to enable proper establishment of integrated farms but refer cost sharing guidelines on some of the inputs. For instance, if the farmers are trained on fruits and vegetable cultivation, production inputs as shown in Table 1 may be arranged to establish an integrated farm.

Table 1. Basic demonstration and production inputs for Lead Farmers

Basic production inputs	Quantity (Numbers)
Planting materials	20 ~ 50
Assorted vegetable seeds	As required
Secateurs	1
Pruning saw	1
Greenhouse plastic/Poly tunnel	1
Sprayer	1
Watering can	1
Sintex tank (2000 Litre capacity)	1
HDPE pipe (25 mm) (Roll)	1

# **Sustainability**

Lead Farmer Model is found to be an appropriate extension approach to enhance extension service delivery especially in our context of limited extension staff. However, to ensure sustainability of the approach, following measures are suggested:

- Institutionalize Lead Farmer Model into the annual programs
- Promote cost sharing mechanisms
- Promote reward for services from lead farmers such as extended farmers repaying lead farmers in kind or other repayments agreed within themselves
- Facilitate technical assistance and input coordination

Annexure 1. Total Number of Lead Farmers trained and handed over to Dzongkhags

	ľ	MONGA	\R	LI	HUENT	SE	TRA	ASHIG	ANG	Y	ANGTS	SE	PEM	IAGAT:	SHEL	SJC	ONGKH	IAR	GR	AND TO	TAL
Year	M	F	T	M	F	T	M	F	T	M	F	Т	M	F	T	M	F	T	M	F	Т
2016-																					
17	6	0	6	3	0	3	4	0	4	4	1	5	4	2	6	6	2	8	27	5	32
2017-																					
18	5	4	9	3		3	3	1	4	6	4	10	1	2	3	8	4	12	26	15	41
2018-																					
19	6	2	8	2	1	3	5	2	7	3	1	4	4	1	5	7	2	9	27	9	36
2019-																					
20	2	7	9	2	2	4	4	0	4	3	2	5	3	0	3	7	1	8	21	12	33
	1																				
Total	9	13	32	10	3	13	16	3	19	16	8	24	12	5	17	28	9	37	101	41	142

In SJ, Lead farmer is inclusive of those trained by SJI 8 in 2016-17, 8 in 2017-18 and 5 in 2018-9

Annexure 2. List of Lead Farmers as of 2019-20

Sl. No.	Name	Gender	Village	Gewog	HH No.	CID No.	Contact No.				
Lhuntse Dzongkhag ( 2 male, 2 female)											
1	Tshering Yangzom	Female	Waiyang	Jarey	CHA-2-33	10602000109	17956516				
2	Deki Yangzom	Female	Jarey	Jarey	CHA-2-01	10602000121	17813074				
3	Sonam Gyeltshen	Male	Zimpong	Kurtoed	СНА-4-98	10604002083	17807701				
4	Sangay Tshering	Male	Chokthamin	Kurtoed	CHA-4-115	10604002067	17596059				
Mongar l	Mongar Dzongkhag (Male-2, Female-6)										

1	Sonam Gyeltshen	Male	Kalapang	Saling	JA-11-258	10715000521	17355333				
2	Pema Yangzom	Female	Walaktang	Thangrong	JA-14-05	10714001905	17270810				
3	Tshering Yuden	Female	Baucheling	Thangrong	JA-14-101	10714000427	17813335				
4	Karma Choden	Female	Soenakhar	Shermuhung	JA-12-169	10712002086	17821144				
5	Pema Cheki	Female	Muhung	Shermuhung	JA-12-59	10712000660	17334334				
6	Sangay Pelmo	Female	Muhung	Shermuhung	JA-12-107	10712000677	17244841				
7	Shacha Dorji	Male	Tormashong	Tsakaling	JA-15-361	10716001348	17467173				
8	Dechen Zangmo	Female	Gob	Drametse	JA-4-	10705001309	17558342				
9	Sonam Yangdon	Female	Gob	Drametse	JA-4-385	10705001299	17945709				
Pema G	Gatshel Dzongkhag (Ma	nle-4, Female-0)			•						
1	Ugyen Chophel	Male	Nangkhor	Shumar	TA-5-237	10905002920	17727404				
2	Sonam Dendup	Male	Tephu	Nanong	TA-10-85	11508003646	17780699				
3	Tashi Tobgay	Male	Thongshingka	Nanong	TA-10-210	11508003664	17571145				
Samdru	up Jongkhar Dzongkha	g (Male-7, Female-1)	•	•	I .	•					
1	Yeshi	Male	Yarphu	Wangphu	NA-8-238	11102007552	17291910				
2	Tshering Sumjay	Male	Yarphu	Wangphu	NA-8-207	11105002525	17315252				
3	Dawa Norbu	Male	Yarphu	Wangphu	NA-8-385	11102007576	17468008				
4	Sonam Tobgay	Male	Yarphu	Wangphu	NA-8-202	11102007243	17899070				
5	Pema Yangdon	Female	Jangchubling	Orong	NA-8-170	11107002877	17645697				
6	Jamyang Dorji	Male	Mentsang	Orong	NA-7-29	11107004350	17833193				
7	Tshering Dendup	Male	Morong	Orong	NA-7-393	11107007615	17324949				
8	Kunzang Dendup	Male	Wuling	Orong	NA-8-24	11107001244	17612284				
Trashig	Trashigang Dzongkhag (Male-4, Female-0)										

1	Ugyen Phuntsho	Male	Moshi	Lumang	MA-6-109	11506003910	17640978			
2	Ugyen Tenzin	Male	Moshi	Lumang	MA-6-27	11506003631	17303801			
3	Dorji	Male	Moshi	Lumang	MA-6-64	10309000269	17612526			
4	Yeshi Tenzin	Male	Drothphu	Udzorong	MA-15-322	11515001966	17570226			
Trashiy	Trashiyangtse Dzongkhag (Male-3, Female-2)									
1	Rinchen Peldon	Female	Bayling	Yangtse	DZA-8-268	11608000680	77876655			
2	Nima Dorji	Male	Langmadung	Yangtse	DZA-8-236	11608000438	77472100			
3	Chorten Dema	Female	Bayling	Yangtse	DZA-8-300	11608000904	17896326			
4	Ugyen Tshering	Male	Sep	Taetsho	DZA-5-191	11605002534	17733670			
5	Tashi Norbu	Male	Sep	Taetsho	DZA-5-198	11605000680	77472748			

# **Annexure 3. List of Lead Farmers of 2018-19**

Dzongkhag	Name	Gender	Village	Gewog	Dzongkhag	Household No.	Contact No.
	Pema Loday	Male	Phawantoed	Tsheankhar	Lhuentse	CHA-8-72	17946811
Lhuentse	Ugyen Wangchuk	Male	Lhasambee	Kurtoed	Lhuentse	CHA-4-90	17903482
	Kelzang Dema	Female	Menbee	Kurtoed	Lhuentse	CHA-4-57	17355585
	Sonam Jamtsho	Male	Horong	Tsakaling	Mongar		17446408
Mongar	Tshering Dorji	Male	Horong	Tsakaling	Mongar		17639658
	Sangay Yeshi	Male	Tshekpa	Jurmey	Mongar		17695251
	Jamtsho	Male	Karmaling	Jurmey	Mongar		77726806
Mongar	Dawa Tshering	Male	Nyamaed	Ngatshang	Mongar		17989310
	Tandin Dorji	Male	Takchu	Mongar	Mongar		17446329
	Sangay Zangmo	Female	Zorgonpa	Chaskhar	Mongar	JA-2-300	77800135
	Sonam Choden	Female	Zorgonpa	Chaskhar	Mongar	JA-2-455	17442815
	Jamtsho	Male	Labar	Khar	Pemagatshel	TA-4-237	17701940
	Thinley Tempa	Male	Dungchilo	Dechenling	Pemagatshel	TA-9-314	17485232
Pemagatshel	Sangay Norbu	Male	Chiphung	Chimoong	Pemagatshel	TA-1-174	77750032
	Dawa Sydon	Female	Kerong	Chokhorling	Pemagatshel	TA-7-467	17441187
	Ngawang Lhendrup	Male	Kerong	Chokhorling	Pemagatshel	TA-8-195	17433133
	Sonam Dorji	Male	Thaangchugonpa	Pemathang	S/Jongkhar	NA-1-21	17838501
Samdrupjongkhar	Sangay Wangchuk	Male	Thaangchugonpa	Pemathang	S/Jongkhar	NA-1-51	17946731
Samurupjongknar	Karma Tshering	Male	Wongthi	Lauri	S/Jongkhar	NA-11-252	17832441
	Gyeltshen Wangdi	Male	Lauri	Lauri	S/Jongkhar	NA-11-211	17468020
	Chimi Wangmo	Female	Manthung	Kanglung	Trashigang	MA-3-471	17303700
	Tshewang Tenzin	Male	Merdaag	Kangpar	Trashigang	MA-4-388	17877059
Trashigang	Rinchen Yuden	Female	Deno	Kheri	Trashigang		17269637
	Gyembo	Male	Dekiling	Radhi	Trashigang	MA-10-222	17668539
	Jamyang Phuntsho	Male	Dzongthung	Bartsham	Trashigang	MA-1-406	17824966

	Nima Gyeltshen	Male	Kheri	Lumang	Trashigang	MA-6-243	17785031
	Choda Zangpo	Male	Tshowoong Poktor	Yangnyer	Trashigang	MA-16-470	77711119
	Duptho Wangmo	Female	Daka	Khamdang	Trashiyangste	DZA-3-87	17816322
Tua ahiyyan ata a	Dorji Wangdi	Male	Serpang	Khamdang	Trashiyangtse	DZA-3-101	77703240
Trashiyangtse	Karma Wangdi	Male	Sep	Toedtsho	Trashiyangtse	DZA-5-185	77765601
	Pema Gyeltshen	Male	Khoblangkhar	Toedtsho	Trashiyangtse	DZA-5-10	77702947

# **Annexure 4. List of Lead Farmers of 2017-18**

Sl. No.	Dzongkhag	Lead Farmer	Village	Geog	Gender	Contact No.
1		Jigme Thinley	Nganey	Jarey	Male	17345931
2	Lhuntshe	Pema Drakpa	Gulipang	Maedtsho	Male	17516616
3		Sonam Tshewang	Jang	Gangzur	Male	17766500
4		Choki Wangmo	Jakhey	Drepong	Female	77995206/1753118 4
5		Pema Lhadon	Kaling	Tsakaling	Female	77271181
6		Sangay Temba	Waichur	Drametse	Male	17733659
7		Pema Dorji	Muktumbi	Jurmey	Male	17546314
8	Mongar	Dorji Lhamo	Chongshing gonpa	Thangrong	Female	17629020
9		Pema Duba	Jamcholing	Mongar	Male	77274098
10		Dawa Yoezer	Jungdung	Saling	Male	17833866
11		Sangay Choden	Tsanzebi	Saling	Female	17442227/7770180 6
12		Tashi Wangchuk	Pogola	Kengkhar	Male	17751719
13		Choki Thinley	Dungmin	Dungmin	Male	17697884
14	Pemagatshel	Kunzang Cheki	Tanzama	Norbugang	Female	17287124/7724227 6
15		Rinzin Delker	Tanzama	Norbugang	Female	77474519
16		Jigme Rinzin	Orong	Orong	Male	17678785
17		Khando	Orong	Orong	Male	17968653
18	Samdrupjongkhar	Laydra	Wangphu	Pangthang	Male	17246761
19		Karma Jimba	Wangphu	Pangthang	Male	17238716/7743583 3
20		Langala	Phimshoong	Phongmed	Male	17956325
21	Trashigang	Galey Wangchuk	Pam	Samkhar	Male/Female	17419429
22	Trasiligalig	Tshewang	Lungrokpa	Shongphoog	Male	17758817
23		Dechen Tshomo	Gayphu	Uzorong	Female	17331277

				_ , , ,	_ ,	17701254/7770125
24		Karma Kinzang Wangmo	Woominang	Boomdeling	Female	4
25		Norbu Dorji	Dalimang	Yangste	Male	77603968
26		Tenzin Wangchuk	Dolepchen	Khamdang	Male	17566732
27		Dorji Wangmo	Baylling	Yangtse	Female	17283923
28	Tashiyangtse	Sonam Choki	Bawoong	Ramjar	Female	17500992
29		Derla	Woominang	Boomdeling	Male	17711973
30		Namsey	Woominang	Boomdeling	Male	17282341
31		Pema Dorji	Woominang	Boomdeling	Female	17302252
32		Namgay	Bamdhir	Boomdeling	Male	17733459
33		Uden Wangmo	Bamdhir	Boomdeling	Female	17282347

# **Annexure 5. List of Lead Farmers of 2016-17**

Sl. No.	Dzongkhag	Lead Farmer	Village	Geog	Gender	Contact No.	CID No.	House No.
1	Lhuntshe	Chozang Dorji	Pangkhar	Khoma	M	17493135	10603002027	СННА-3-124
2		Singye Wangchuk	Shuma	Khoma	M	17995300	10603002354	СННА-3-293
3		Gayduen Jamtsho	Jallang	Menji	M	17659085	10606001690	СННА-6-137
4	Mongar	Kinzang Jurmey	Udaric	Kengkhar	M	17767858	10708002489	JA-8-344
5		Thukten Wangdi	Silambi	Silambi	M	17475147	10713001029	JA-13-290
6		Kota	Yabung	Chaskhar	M	17682605	10703001226	JA-2-293
7		Norbu	Chema	Ngatshang	M	17671719	10710001097	JA-10-259
8		Sonam Tshering	Nagor	Silambi	M	17525941	10713001661	JA-13-138
9		Sangay Tshering	Nagor	Silambi	M	17929969	10713001703	JA-13-142
10		Ugyen Wangdi	Tshenkharla	Khamdang	M	17733805	11603003194	DZA-3-542
11	Tachimanatac	Khampa	Tachema	Jamkhar	M	17889818	11602002115	DZA-2-233
12	Tashiyangtse	Neychen	Ghorshing	Tongmijangsa	F	17768105	11606001468	DZA-6-251
13		Neten Tshomo	Bawoong	Ramjar	F	17902170	11604000152	DZA-4-315
14		Phurpa	Durchen	Yangtse	M	17742099	11608000447	DZA-8-238
15		Tshewang Dorji	Dramang	Shongphu	M	17478479	11502002399	MA-13-534
16		Tenzin Wangdi	Dramang	Shongphu	M	17350315	11513003417	MA-13-640
17	Trashigang	Tshewang Tashi	Dramang	Shongphu	M	17594973	11513003419	MA-13-538
18		Gembo	Dramang	Shongphu	M	17568658	11513002734	MA-13-658

19		Am Sangay	Shumar	Shumar	F	17751214	10905004918	TA-5-194
20		Dechen Lhendup	Tephu	Nanong	M	17776923	11508003578	TA-10-75
21		Kinley	Bargonpa	Nanong	M	17730510	11508000281	TA-10-485
22	Pemagatshel	Norbu Rinchen	Tshelingkhor	Zobel	M	17803319	10907001916	TA-7-250
23		NgawangTshomo	Tshelingkhor	Zobel	F	17304184	10907001732	TA-7-231
24		Kencho Wangdi	Khangma	Yurung	М	17691722	10906001009	TA-6-29

# Annexure 6. Format to maintain record of extended farmers by Extension staff

Sl. No.	Name	Age	Gender	Village	Gewog	Thram/ CID No.	Education	Land holdings (Acre)	Trainings attended in the past

# Annexure 7. Format to record extended services by Lead Farmers

Date	Name	Gender	Village	Gewog	Services provided	Quantify services (if possible)

## Annexure 8. Samples of Case story write ups on Lead Farmer Expansion

## Lead Farmer and a Prospective Lead Farmer (PLF) begins Farmer-to-Farmer Extension Service

Although most of the Lead Farmers (LFs) and Prospective Lead Farmers (PLFs) have begun extending the knowledge and skills gained from the training in one way or the other but some of the notable extension services rendered by LFs and PLFs are as follows:

- Mr. Phurpala of Yangtse, a Lead Farmer of 2016-17 batches trained at ARDC Wengkhar has begun extending the knowledge and skills gained from training to his fellow farmers. Apart from extending his knowledge and skills on construction of low cost green house, vegetable production and fruit crop management he has also guided about 60 fellow farmers on electric fencing for effective crop protection against wild life depredation. Such voluntary service is what all trained Lead Farmers are expected to deliver for effective farmer-to-farmer extension.
- Similarly, Mrs. Karma Kinzang Wangmo, a Prospective Lead Farmer of 2017-18 batches of Lead Farmers is helping the chilli growing group in Bumdelling find an alternative chilli drying technology. In this respect, she led an 18 member group for an exposure visit to ARDC Wengkhar to see solar drier model at Wengkhar. As a result they have planned to set up two solar driers with one set from ARDC Wengkhar's allocation of CARLEP fund and the other set with contribution from the group members. In doing so she has helped one of her fellow farmers, Mr. Pema Rinzin establish an integrated fruits and vegetables farm with production input support such as fruit planting materials, vegetable seeds and greenhouse from ARDC Wengkhar.

• Likewise, Mr. Ugyen Tenzin of Gangzur under Lhuentse Dzongkhag, a trained Lead Farmer has also provided extension service. As such the trained Lead Farmer volunteered as resource person for the training organized by Gangzur Gewog Agriculture Extension and trained about 70 farmers (52 Male and 18 Female) on vegetable seed production techniques



Lead Farmer Phurpa of Yangtse expanding his services



Kinzang Wangmo leading a group in chilly



Ugyen Tenzin training other farmers in seed production

Lead Farmer in Labar Village Khar Pemagatshel picks up fruit seedling production and expands his crop management skills to others.

Jamtsho, a lead farmer trained at ARDC Wengkhar a year ago began setting up a mixed fruit orchard and vegetable cultivations. A fruit nursery of avocado plants was also established with mother plants from ARDSC Lingmethang planted few years ago. The mother plants have started fruiting which is used to develop avocado saplings and are sold to others in his village. This year, Jamtsho raised 2500 saplings for other farmers plant.

Jamtsho and the geog agriculture extension staff assisted 20 households to prune some 2500 trees in Labar village thereby initiating expansion of skills from farmer to farmer. They will also be helping growers in orchard management in the neighbouring village Bongman and others.

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