

Project stakeholder review meeting record

(Project AGB/2012/078)

Venue:

Center for agriculture and forestry development of the North West
Northern Mountainous Agriculture and Forestry Research Institute (NOMAFSI)
Chieng Ban commune, Mai Son district, Son La province

Time:

June 25th 2020

Objectives:

- Introduction of the project research results to the provincial agencies, farmers, local staff and processing units;
- Discussion of strategies to expand adoption of improved technology for the sustainable development of cassava production in Son La.

(Agenda attached)

Chair

- Ms Cầm Thị Phong, Deputy Director of DARD Son La
- Mr Lưu Ngọc Quyến, Deputy Director of NOMAFSI

Participants :

58 participants including:

- Department of agriculture and Rural Department of Son La (DARD): Leaders and relevant staff.
- Project sites: Thuan Chau and Mai Son districts: District leaders and staff from center for agricultural inputs.
- Project sites: Communes where activities were implemented including Nà Ót, Chiềng Chăn, Púng Tra, Bó Mười: Commune leaders, commune staff, farmers who participated in project activities and other farmers who are planting cassava, village leaders.
- Implementing agency: NOMAFSI leaders and project staff.
- Center for Center for agriculture and forestry development of the North West: Leaders and researchers.
- Son La cassava starch processing factory (FOCOCEV) located at Mường Bon commune, Mai Son district: Mr Ngô Quang Tuan – Deputy Director.
- Information and communication of Son La Province
- Television of Son La province
- International Center for Tropical Agriculture (CIAT)

Main results

1. Visit varieties multiplication field

Varieties multiplication fields of 2 new improved cassava varieties (BK and 13Sa05) that were found suitable for development in Son La was visited by all participants.

These two varieties have been under evaluation for 3 years that generate higher yield than KM94 and La Tre. In addition, they are short stem varieties that are resilient to winds and have short roots that make harvest easier. They have starch contents as same as KM94 and La Tre (29%-30%). Some farmers would like to have these varieties for production.

2. Main project research results

2.1. *Presentation of results on value chain analysis, development and impacts made*

Key points:

- There are many middlemen in between farmers and factories which explains the large difference between farm gate price and at factory price of fresh roots
- Appropriate fertilizer for cassava is not available. Fertilizer applied by farmers does not met with cassava demand both in terms of amount and types.
- Farmers have limited or no access to extension services relating to cassava production.
- Linkages between growers and cassava starch processing factories are not well developed.
- Farmers need:
 - Varieties, that can be used for fresh consumption for livestock but have a high yield.
 - Fertilizer: Appropriate fertilizer for cassava available at the local level.
 - Technical assistance: Cultivation technology and fertilizer application and conservation agriculture techniques that assure soil fertility and reduction of soil erosion but are not labor consuming and require little investment.
 - Consumption of roots: Would like to have high and stable price.
- Factories need:
 - To have fresh roots for processing year around.
 - To have more varieties that have higher starch contents introduced into production.

2.2. *Presentation on agronomic experiment results*

- Fertilizer: Application of single fertilizer separately at 40N/10P/40K (equivalent to 87 Urea + 142 kg triple superphosphate + 80 kg KCL) in 3 times (1 basal and two top dressing) can generate the highest return with 20 tons/ha on KM94. Use higher amount of fertilizer at 60N/15P/60K (130 Urea + 213 kg triple superphosphate + 120 kg KCL) can generate higher yield but diminish in return on labor.
- Sustainable cultivation technology on sloping land: Technology including intercrops with legumes, establishment of contour lines with grass strips or cassava stems can help in reserving soil or improve income generation sources but required more labor and inputs that hinder farmers to adopt. In addition, these technology are not very effective on steeply sloping land.
- Density: The most suitable density is 12.500 plants/ha - this generates the highest return for KM94 – a common variety of Son La
- Harvest staggering: Late harvest of KM94 still give good starch contents of above 24.5% (harvest from April to November) that meets the requirement of the factory. It can generate higher income for farmers if the price during the off season is higher than during the peak harvesting season.

3. Discussion on expansion of adoption of improved technologies for sustainable development of cassava production in Son La

a) Adoption of recommended technologies by the project

The project has made contributions in changing perception and awareness of farmers in cassava production:

- New varieties: Farmers highly appreciated two new varieties of BK and 13Sa05; They have already reserved these varieties for following season and shared to other farmers in the village. Some are willing to buy these varieties if they are available.
- Grass strips for soil erosion control: This is acknowledged as being effective for soil erosion control and use for livestock feeds. However, adoption has been limited as cassava fields are usually far away from home. Grass seeds are planted nearby home instead.
- Contourline with cassava stems: It is easy to make, requires little labor and does not need financial investment so some farmers in Na Ot have adopted this technique and expanded it.
- Cultivation techniques and fertilizer application: Farmers adopted basal and top dressing fertilizer including potassium fertilizer which is important for cassava. Farmers have adopted placing cuttings correctly and utilizing the correct density of planting.

- Cassava harvesting tools: These are rated by farmers as being very convenient. The tools have already been improved by the farmers to make it easier to carry to steep fields.

b) Linkages between farmers and factory.

Cassava factory belong to FOCOCEV:

FOCOCEV has 14 factories in Vietnam, mainly located in the central and southern regions of Vietnam. In those areas they have sufficient materials for processing year round. In Son La the factory can source materials for processing from October to April (capacity 1,000 – 1,200 tons fresh root per day). There is an abundance of fresh roots at peak harvest but no roots available during the off season (March to September).

The factory invested together with farmers 5 years ago (giving planting materials and fertiliser on credit), but instead of selling fresh roots to the factory the farmer sold to other buyer. The factory now sources materials from traders based on market price.

The price in 2019 at the factory is 1.500 – 1.800 VND/kg while at the farm gate farmers just could sell at 800-1000 VND/kg to traders. Transaction costs seem high while quality of roots are worse. The factory is willing to buy roots directly from farmers and give priority to farmers who bring roots directly to the factory. If roots are available in the off-season, the factory is willing to pay a premium price provided that minimum starch content is 22% and there are sufficient deliveries to ensure a minimum volume of 300 tons fresh roots per day (30% total capacity).

Farmers:

Would like to have more new varieties with high starch content and the correct formulation of fertilizer available at communes. The price of fresh roots in in Pung Tra is currently low just from 700-900VND/kg because the fields are far away and steep, so that the cost of harvesting and transport is high. Farmers would like to have support from government.

c) Possible solutions suggested

DARD:

DARD suggested that the Center for Agricultural Inputs and the extension system should collaborate with the factories and help in production organization and linking farmers to factories. DARD will give support in providing extension services to improve adoption of improved cultivation practices by farmers.

Son La starch factory (FOCOCEV):

The factory is willing to support the distribution of new varieties and buying fresh roots from farmers, and will give priority to farmers when they bring their fresh roots directly to sell to the factory. The main priority of the factory is to have a supply of fresh roots in the off-season.

The factory is willing to collaborate with research agencies to trial varieties for evaluation before distribution to farmers.

NOMAFSI:

Suggest to develop production areas based on agro-climate conditions, varieties and planting time; Production planning requires support from the provincial authority and should be in collaboration with the sourcing plan from the factory for the extending of processing time into the off season. The might also need fresh root management after the harvest to ensure quality for processing. There is also a need for technology that can process starch from dried chips.

Farmers

Suggest that new varieties have high yield and resistant to disease and can plant at any time of the year in Son La should made available for farmers; The farmers all want partners to disseminate suitable technology to improve cassava value and profits for cassava farmers.

CIAT:

Suggested a linkages model (network) that links reseach, production planning, production organization and processing planning and organization. This model should be tested further to confirm how well it works in terms of dissemination and widespread adoption of improved technology.

All participants agreed that it would require at least three years to develop and test the mode before it can run independently.

4. Conclusion

Ms Cầm Thị Phong, Deputy director of DARD Son La acknowledged that there are some technologies that can be scaled out in adoption in Son La. This includes including new varieties (BK and 13Sa05), and promoting correct fertilizer application and soil erosion control technologies.

The suggestions on improve linkages between farmers and factories are acknowleged by DARD and would be reported to the provincial authorities for support. DARD will advise the provincial authority about the development of cassava production zones and proposals to improve linkages between research, production and processing.

Mr Luu Ngọc Quyến, Deputy Director of NOMAFSI thanked all parcipants and hope to have fruitful collaboration with DARD Son La in the future and also hope that the provincial authority can develop and issue polices that can facilitate linkages between research, production and processing.

Agenda

Time	Activities	Responsible
8h00 - 8h30	Registration	
8h30 - 8h40	Welcome speeches	NOMAFSI
8h40 - 8h50	DARD's speech	DARD
8h50 - 09h50	Field visit	All
09h50 - 10h00	Break and photos	
10h00 - 11h10	<i>Presentation of project research results</i>	
	- Cassava value chain analysis	CIAT
	- Agronomic trials	NOMAFSI
	Lunch	All
11h10 - 12h30	Discussion on scaling adoption	
	-	
	-	
	-	
	-	
12h30 - 12h45	Close	DARD/NOMAFSI

List of participants

STT	Họ và tên	Chức vụ	Địa chỉ
1	Cầm Thị Phong	Phó Giám đốc Sở	Sở NN&PTNT
2	Cầm Thị Thắm	PGĐ Trung tâm	TT KN tỉnh Sơn La
3	Phạm Thị Lan	Chi cục phó	Chi cục TT&BVTV
4	Ngô Mạnh Cường	Chuyên viên	Chi cục TT&BVTV
5	Nguyễn Xuân Hoàng	Phó CT UBND huyện	UBND huyện Thuận Châu
6	Tòng Văn Diên		Phòng NN huyện Thuận Châu
7	Quàng Thị Phượng	Chuyên viên	TTDVNN huyện Thuận Châu
8	Phạm Đức Toàn		TT DVNN huyện Mai Sơn
9	Vũ Đình Mạnh		TT DVNN huyện Mai Sơn
10	Nghiêm Quang Trung		Phòng NN huyện Mai Sơn
11	Nguyễn Quang Tuấn	Phó GD	Nhà máy Tinh bột sắn Sơn La (FOCOCEV)
12	Cù Thị Lệ Thủy		TT NC NN nhiệt đới Quốc Tế (CIAT)
13	Lưu Ngọc Quyến	Phó Viện trưởng	Viện KHKT NLN MN phía Bắc
14	Phạm Thị Sến	Giám đốc dự án	Viện KHKT NLN MN phía Bắc
15	Nguyễn Thị Thu Thủy	Phó Trưởng phòng KH&JTQT	Viện KHKT NLN MN phía Bắc
16	Mai Thu Hà	Nghiên cứu viên	Viện KHKT NLN MN phía Bắc
17	Lê Việt Dũng	Nghiên cứu viên	Viện KHKT NLN MN phía Bắc
18	Nguyễn Phi Hùng	Giám đốc Trung tâm	TT NC&PT NLN Tây Bắc
19	Phan Huy Chương	Nghiên cứu viên	TT NC&PT NLN Tây Bắc
20	Nguyễn Tiến Sinh	Nghiên cứu viên	TT NC&PT NLN Tây Bắc
21	Bùi Thị Hằng	Nghiên cứu viên	TT NC&PT NLN Tây Bắc
22	Hoàng Xuân Thảo	Phó Trưởng Bộ môn Canh tác	TT NC&PT NLN Tây Bắc
23	Lường Văn Tiệp	Chủ tịch xã	Chiềng Chăn - Mai Sơn
24	Lường Văn Tất	Hội nông dân xã	Chiềng Chăn - Mai Sơn
25	Lò Văn Phương	Nông dân	Chiềng Chăn - Mai Sơn
26	Lường Văn Nguyên	Nông dân	Chiềng Chăn - Mai Sơn
27	Lèo Văn Nhất	Khuyến nông xã	Chiềng Chăn - Mai Sơn
28	Lường Văn Thơm	Nông dân	Chiềng Chăn - Mai Sơn
29	Phạm Quỳnh Nga	Hội nông dân xã	Nà Ót - Mai Sơn
30	Vì Văn Thiện	Nông dân	Nà Ót - Mai Sơn
31	Lò Văn Hà	Nông dân	Nà Ót - Mai Sơn
32	Lò Văn Quảng	Nông dân	Nà Ót - Mai Sơn
33	Lường Văn Quân	Nông dân	Nà Ót - Mai Sơn
34	Tòng Văn Vĩnh	Nông dân	Nà Ót - Mai Sơn
35	Vì Văn Hom	Nông dân	Nà Ót - Mai Sơn

36	Vì Văn Thương	Nông dân	Nà Ốt - Mai Sơn
37	Lường Văn Loan	Hội nông dân xã	Púng Tra - Thuận Châu
38	Lò Văn Hồng	Khuyến nông xã	Púng Tra - Thuận Châu
39	Lò Văn Tâm	Khuyến nông xã	Púng Tra - Thuận Châu
40	Lò Văn Định	Nông dân	Púng Tra - Thuận Châu
41	Lường Văn Tường	Nông dân	Púng Tra - Thuận Châu
42	Lường Văn Dũng	Nông dân	Púng Tra - Thuận Châu
43	Lường Văn Thắm	Nông dân	Púng Tra - Thuận Châu
44	Quàng Văn Kiên	Nông dân	Púng Tra - Thuận Châu
45	Lường Văn Minh	Nông dân	Púng Tra - Thuận Châu
46	Lò Thị Tươn	Nông dân	Púng Tra - Thuận Châu
47	Lò Văn Nhân	Nông dân	Púng Tra - Thuận Châu
48	Lường Văn Hùng	Chủ tịch xã	Bó Mươi - Thuận Châu
49	Lò Văn Dũng	Nông dân	Bó Mươi - Thuận Châu
50	Quàng Văn Ước	Nông dân	Bó Mươi - Thuận Châu
51	Lò Văn Điển	Khuyến nông xã	Bó Mươi - Thuận Châu
52	Lò Văn Nội	Nông dân	Bó Mươi - Thuận Châu
53	Quàng Văn Tại	Nông dân	Bó Mươi - Thuận Châu
54	Lò Tiến Thành	Nông dân	Bó Mươi - Thuận Châu
55	Phan Văn Dương	Cán bộ truyền thông	TTTT - Sở KH&CN
56	Phạm Trang Nhung	Cán bộ truyền thông	TTTT - Sở KH&CN
57	Sa Hằng	Cán bộ truyền thông	Đài truyền hình Sơn La
58	Bích Liên	Cán bộ truyền thông	Đài truyền hình Sơn La