#### United Nations Conference on Trade and Development

#### **National Workshop on**

## Fostering Integration of the Lao People's Democratic Republic Downstream Value Chain of Maize into Regional Value Chains

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Approach and Activities to improve the Maize Value Chain

By

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The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.



# Approach and Activities to improve the Maize Value Chain



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### **Project Objectives**

The Project Development Objective (PDO) is to increase competitiveness of selected agricultural value chains in the project areas.

- Measured by 3 PDO-level indicators:
- 1. Change in agricultural land productivity of the targeted farmers
- Increase in sales of farm produce as a share of production among targeted farmers
- 3. Increase in milling efficiency of the targeted rice mills

## Component A: Improved Agricultural Efficiency and Sustainability

#### This component supports

- A1: SEEDS (increased adoption of improved varieties and high-quality seeds)
- A2: GAP (increased application of Good Agricultural Practices),
- A3: IRRIGATION (provision of critical productive infrastructure)
- A4: CAPACITY (strengthening of public services delivery)

#### Implemented by PAFO/DAFO with support from MAF technical departments:

- 1. DTEAP (Department of Technical Extension and Agro-processing)
- 2. DoA (Department of Agriculture)
- 3. DALaM (Department of Agricultural Land Management)
- 4. Dol (Department of Irrigation)
- 5. NAFRI (national Agriculture and Forestry Research Institute)

## Component A2: Promoting Good Agricultural Practices

#### **Objective**

Establish FPGs and build their capacity to adopt GAP:

30,000 ha: 220 rice FPGs, 70 maize FPGs, and 50 vegetable FPGs

#### Progress so far 260 FPGs organized of (334) required (78 % reached)

- 179 Rice Production Groups registered
- 31 Maize Production Groups registered
- 43 Vegetable Production Groups registered
- 7 Organic Vegetable Production Groups registered
- Area covered FPGs is 20,129 ha, about 65 % of the target



Organic vegetable production in Bolikhamxai



GAP use of fertilizers

## **Promoting Good Agricultural Practices**

#### **Targets for maize**

Establish 70 maize FPGs that

- cover 5,000 ha
- 2,476 benefitting households
- Contract farming with Agribusinesses for 53 maize FPGs
- covering 3700 ha



#### **Achieved after 2.5 years:**

31 Maize FPGs in Parklay District, covering 4228 ha

				FPGs			Households organized				Area (ha)			Women in Leadership		
Province	Dist.		# Villages	Target	Progress	% vs Target	Target/	Progress/ Tot.	Progress/ Female	% vs Target	Target	Progress	% vs Target	Tot.	Female	% of share
XYL		1	10	70	31	44%	2,476	1,346	366	54%	5,000	4,228	85%	246	48	20%
1	Paklai		10	70	31			1,346	366			4,228		246	48	
Total			10	70	31	44%	2,476	1,346	366	54%	5,000	4,228	85%	246	48	20%

## Main problems of maize farmers in Parklay

- Insufficient production management,
- Low yields as a consequence of soil degradation,
- Insufficient and irregular technical extension.
- Insufficiencies of inputs and mechanized equipment
- Production losses in maize crops e.g. fall armyworm

#### **High production cost**

Renting machinery and services

- Soil preparation
- Direct seeding

Use of inputs

- Imported seeds
- Sub optimal use of fertilizers and pesticides

#### **Financial constraints**

- Shortage of funds
- Credit accessibility: Formal requirements hard to fulfil for farmer groups
- Informal loans with high interest rate resulting recurrent depth.





## Main problems of maize farmers in Parklay (continued)

#### Lack of marketing skills

- Some groups have a fixed contract with one buyer.
- Ensuring that there is a market for the products.
- Possibilities for price negotiations limited
- Lack of alternative buyers.

#### Deficiencies in post-harvest management and timing of sales

- Lack of facilities for drying maize and beans.
- Groups are forced to sell fresh produce at a comparatively low price.
- Fresh sales increase the dependency from the buyer of the product.
- When buyers are not in time: quality losses and price reductions

#### Better post-harvest management:

- Reduce losses and
- Increase income: sale of dry Maize dry, off season in peak price periods.

#### Reasons for selling immediately after harvest

- cash needs of the families
- unavailability of drying and storage facilities.



## **Promoting Good Agricultural Practices**

#### **Activities of LACP for GAP promotion and enhancement of competitiveness**

- GAP Manuals and trainings for Maize farmers  $\rightarrow$  GAP certification
  - Technical extension
  - Correct use of fertilizers and pesticides
- Field demonstrations on GAP and fertilizer use → optimal use of resources
- Integrated pest management → reduce risk
- Support of legumes as a second crop after maize → optimal use of resources
- Link farmers to markets → reduce risk, increase competitiveness
- Access to critical investment through matching grants → increase competitiveness





## Matching Grants for Farmer Groups

- Content of an Investment plan:
  - Group profile
  - Problem analysis
  - Strategy for cost structure improvement
  - Business plan
  - GAP adoption

MGs are up to 16,000 USD per group A 20 % contribution from the group is required The final 10 % are released after GAP adoption

Typically, MPGs invest in Machinery: Walking tractors equipped for direct seeding High quality seed GAP Certification, Packaging Designs and Marketing

Expectations:
Decrease of production cost by about 20 %
Increase in yield about 10 %

Application Procedures: Ministry of Agriculture and Forestry PAFO/DAFO launches marketing and Department of Planning and Finance Call for expression of interest from farmers/producers to form into farmer groups in adopting agricutlure technolog Lao PDR Agriculture Competitiveness Project PAFO/DAFO organizes farmers into a egister farmer groups as SMG and FPG a District Office (LACP) Establish Farmer Group Commitee and open bank account at nearest local bank dentify SMG/FPG needs of training, production and post-harvest handling Matching Grant PAFO/DAFO provides training on Investment Plan preparation, GAP, Seed Multiplication and Organic Agriculure PAFO/DAFO assists SMG/FPGs to prepar for Farmer Group SMG/FPG submits Investment Plan to PAFO and NPMO Investment Plans are evaluated by an Evaluation Committee established by PAFO and the evaluation scores and feedbacks are communicated to SMG/EPGs If score passes the minimum scor requirement, PAFO invites SMG/FPGs to sign Letter of Grant Agreement between Director of PAFO and President of SMG/FPG implements Investment Pla and request for first tranche reimbursement up to 90 per matching grant. SMG/FPG adopts technology packag (GAP, Seed Multiplication, Organic Agriculture) up to 50% by members.

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 PAFO/NPMO releases final tranch of reimbursement of completed activities upon valid verification of technology

## Support to Agribusinesses

#### Agro-processing and storage equipment are below regional standards

Investment is needed

Commercial loans for purchase of new equipment and upgrades are not common

- Banks are reluctant to take on what they see as risky loans and
- Abs perceive bank interest rates as too high
- ABs are not sufficiently trained to present good business plans to banks or to the SME fund
- The SME Promotion Fund decree was signed in September 2019 by the PM. Release of SME funding must be through commercial banks or financial institutions based on sound business plans. The fund must prioritize low interest loans for the agricultural processing industry, handicrafts, agriculture and livestock businesses as well as tourism.

## Support to Agribusinesses

Support to Agribusinesses in of LACP:

- Deliver Technical and financial services to agribusinesses (ABs)
- Improve operational standards and efficiency of ABs: rice, maize, and vegetables
- Provide training in business plan development, bookkeeping, financial reporting etc.

Technical assistance and matching Grants /matching grant approach in the project will lead to

ABs investing in their own enterprises, upgrading their outdated and inefficient equipment/facilities and increasing their milling rates and/or reducing post-harvest losses.

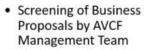
Maize ABs have expressed interest for MGs to

- build drying space,
- building/improve storage, and
- working with farmer groups

The contribution of the AB to the MG is 50%

## Agriculture Value Chain Facility Matching Grant Cycle

#### **AVCF MATCHING GRANT CYCLE**



· Evaluation by an Independent Committee

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· Detailed Business plan appraised and recommended by **AVCF Management** Team and approved by Secretariat of MAF.

#### 1 Calls for Business **Proposals**

- AVCF Management Team calls for business proposals on mass media and send invitations directly to potential ABs
- · First comes first serves

3 Business Plan **Evaluation** Development

> · Preparation of a detailed business plan, assisted by local consultants.

4 Approval / LoGA Signing

> · ABs implement the approved business plan.

**Implementation** 

 AVCF Management Team in collaboration with PAFO/PICO conduct supervisiong and monitoring

### Linking Farmers to Markets

#### Agribusinesses and farmers as partners

ABs that receive matching grants are engaged in contract farming with farmers

Productive partnerships between ABs and famer groups

→ about 6 partnerships per AB required

Sourcing of raw materials

 $\rightarrow$  Proportion of raw materials sourced by targeted ABs from farmers in the target areas increased by 30 %

In addition, farmers benefit from GAP certification and packaging

## Summary

