La’o Hamutuk submission on

Draft Mechanization Policy

01 March 2018

La’o Hamutuk thanks the Ministry of Agriculture and Fisheries (MAF) and Food and Agriculture Organization (FAO) for the opportunity to comment on the draft mechanization policy.

In general, we believe that this draft policy has represented many of our ideas about a good mechanisation policy for Timor-Leste, but would like to raise some concern to be considered when finalising and implementing this policy.

General comments

- Mechanization can improve labour productivity, increase production, reduce post-harvest lost, and strengthen the post-harvest processes, but it also comes with some proven social, economic and environmental impacts. It is important for this policy to recognise these negative impacts and set appropriate strategies to overcome them. Any mechanization program should conduct deep social, economic and environmental impact assessments prior to implementation. This policy should make it clear that no mechanization tools are introduced into the community if there is no prove that it will benefit the community for the long term.

- Mechanization will increase the cost of farming, which they will pay by selling their products. Considering the current issue with markets for farms’ products, we should worry if farmers can sell enough to cover the increasing cost. In some developing countries, farmers have ended up selling their properties to pay the debt they acquire to run their farms. The government should not introduce mechanization just to achieve high productions by exposing its people to such risk.

- Mechanization, as defined in the start of this policy document, has been there in Timor-Leste agriculture sector for a long time. The main difference is, while the traditional mechanization uses the resources in the community, the current approach of the modern mechanization introducing new technologies developed in other country. One risk of this approach is the damage of local practices and social cohesion. As for the case of tractor, it reduces farmers work but at the same time replace the tradition of working together to prepare the land. The government or any agencies who want introduce any farm machinery to a community should research the target community; locate existing informal groups that have been there for a long time, and understand the possible impacts to the community. Machinery should be
introduced to these groups to strengthen the social cohesion, and as a new opportunity to improve their knowledge and skill, through using and managing these farm machineries together.

- On other aspects, **mechanization will reduce the requirement for human labour which can result in the declining of the numbers of farmers.** This would be contra-productive with the government objective to resolve the unemployment issue.

- **The environmental impacts of the mechanization should be assessed carefully before introducing any machinery.** For example, the use of tractors kills soils organisms, causes soil compactions and many times remove the top fertile soils. These impacts are well studied, but mechanization programs continue to promote tractor because of its abilities to increase farm productivity. Timor-Leste has a very small area suitable for agriculture. If these areas continue to be damaged by mechanization practices, we will never be able to achieve any target of food sufficiency.

- **The use of farm machinery tends to lead to monoculture practices, aimed to increase production of certain crops.** Mechanisation can be a threat to conservation agricultural practices such as minimum tillage and intercropping. A maize harvester cannot harvest maize if farmers plant beans and potatoes in the same farm. This demotivates intercropping in farms. The Ministry of Agriculture and Fisheries has done many experiments about intercropping and has recommended intercropping practices to farmers but the mechanization can limit this practice. Monoculture practices are contradicting with the current family farming practices. Most of the farms are run by the family that grow different types of crops in one farm. Additionally, monoculture exposes farms to pest and disease attacks, and more vulnerable to the impact of climate change.

**Specific comments and suggestions**

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<th>Page no.</th>
<th>What the text said</th>
<th>Comments/Suggestions</th>
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<td>2</td>
<td>As such, the Agricultural Mechanization Policy provides a sub-sectoral strategic framework for applying key interventions recommended by Timor-Leste’s new Agriculture Policy (2017) in that it promotes…. Guided by the overarching &quot;Agriculture Policy and Strategic Framework: Towards Nutrition-Sensitive, Climate Smart Agriculture and Food Systems&quot; in Timor-Leste in 2017, this Agricultural Mechanization Policy presents…</td>
<td>This policy should not refer to a draft policy that has not been approved by the Council of Ministry.</td>
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<td></td>
<td>Methodology:</td>
<td>Per our knowledge, the consultation process has not included direct consultation with many local NGOs who work on agriculture, water and land conservation, environmental protection, etc. For example HASATIL (Sustainable Agriculture Network), MOKATIL (Peasant Movement), Permatil (Water, Land and Environment Conservation), Fundasaun Haburas (Environmental protection). We are happy to provide lists of organizations whose works are related to this policy.</td>
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<td>Lesson learned:</td>
<td>As our comments above, mechanisation can limit certain practices under conservation agriculture. We should also understand that some conservation agriculture practices, particularly the zero and minimum tillage can lead to the use of chemical herbicides and pesticides.</td>
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<td>Lesson learned</td>
<td>Add this point to the Lesson learned section:</td>
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<td>Challenges and issues</td>
<td>Add to challenge and issues:</td>
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<td>Challenges and issues:</td>
<td>The government did build some basic infrastructures to support fishers such as fish auction centre (Tempat Pelelangan Ikan - TPI) in some places but did not manage it well, and did not train fishers to use and manage the centre for their benefits.</td>
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<td>Opportunities:</td>
<td>This can lead to the use of cheap and low-quality technologies. We should expect that the introduction the mechanization will increase the cost of farming.</td>
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| 8 | **Opportunities:**
Increasing collaboration and develop and strengthen public-private-community partnerships along supply chains with a transition from government to private sector service delivery and from government to community or producer group and local entrepreneur ownership of agricultural machinery assets. |
| 8 | Timor-Leste constitution recognised three economic institutions: public, private and cooperative.
Suggestion: add Cooperative
Increasing collaboration and develop and strengthen public-private-community partnerships along supply chains with a transition from government to private sector service delivery and from the government to the community, cooperative or producer group and local entrepreneur ownership of agricultural machinery assets. |
| 8 | **Opportunity**
Suggestion: Add this point to Opportunity section:
- Opportunity to involve Cooperatives organization in implementing mechanization strategies and provide them with specific training to be able to manage and control the implementation of mechanisation programs. |
| 9 | **Opportunity**
There are no existent mechanized production and post-harvest systems of fisheries in the country. This presents significant investment opportunities in the sub-sector along the food chain.... Most fish is currently sold on the roadside under unhygienic conditions, despite the existence of supermarkets.

Suggestion: remove the highlighted sentence.
In Timor-Leste, we have seen supermarkets selling expired products, and we know that most of their fishes are imported. This sentence implies that supermarkets are the solutions to resolve the unhygienic issue when it is clearly not. |
| 10 | **Guiding principles**
As we explained in general comment, mechanisation tends to lead to monoculture practices as it is easier to manage, but lead to negative impacts such as vulnerability to pests and disease, and the impact climate change.

Suggestion: add new guiding principles:
Diversification approach: focusing on mechanisation strategy that does not limit farmers to only grow one product on their farms. Diversification reduces vulnerability to harvest losses and the hazard impact of climate change. |
To provide a solution to the current infectivity in mechanization programs we should not draw any number without proper reason. We should have a specific number of manufactures, blacksmiths and other metal workers that we need in districts or subdistricts level.

To’os ba Moris Di’ak (TOMAK) Programme (2016-2026) and Avansa Agricultural Project (2015-2020) have already analysed and developed value chain of selected commodities...

Etc.

The mechanization policy shouldn’t refer to any international agencies projects whose long-term benefit has not been independently investigated.

The policy repeatedly refers to projects implemented by international NGOs. A policy paper should not directly or indirectly promote certain international NGOs or programs.

We suggest removing the reference to Tomak, Avansa, CRS, Mercy Corps, FAO, and IFAD and other in this policy document. We noted it on pages 14, 15 and 16.

Reviewers

Mariano Ferreira & Maxi Tahu
Agriculture Team