

Status of Seed industry in Cambodia

1.General current status

Over the past twenty years, projects by governmental and non-governmental organizations have supported local and community-based initiatives in different provinces with the emphasis on seed production group and farmer training on seed production, mostly for rice. Some of these have done good work during implementation but they often lacked a sound financial or marketing plan and were not sustainable after project closure. However, despite these many useful interventions, and much experienced gained, the seed sector remains uncoordinated and is not in a strong position to move to a more commercial model. Making this transition is a key element in the strategy of the Government for strengthening agricultural production generally and increasing the export of high quality milled rice.

Many other crop seeds, notably of maize and vegetables, are mostly imported from other countries where there are well-established private companies with their own breeding programs. In the short term, it is difficult for Cambodia to produce and supply these seeds to the same quality standards. For these crops, emphasis should be placed on strengthening a more organized system for testing and registering varieties that are useful for farmers and at the same time strengthen local varietal development and seed production and distribution.

2.Strategy of seed industry development

2.1. Management of seed industry

The law on seed management and plant breeder's right enacted in 2008 and more declarations made under this law. It provided the legal basis for regulating the seed sector. To ensure good coordination, MAFF will establish a seed management unit which will manage the regulatory functions and act as a focal point for all activities and information related to seeds and a national seed council to oversee or monitor the development of seed sector.

2.2. Variety development

Breeding improved varieties is essential for maintaining and increasing agricultural productivity, particularly to address the needs of diverse market and to increase climate resilience. Much of this work is conducted by public institutions and where appropriate, in partnership with the relevant international agricultural research institutes. However, private companies and other organizations are also encouraged to undertake plant breeding and selection to increase the choice of varieties available to farmers and other stakeholders. The introduction of plant variety protection, companies or their local agents are encouraged to conduct trials of new varieties in the main production areas or in the research stations.

2.3.Variety testing and registration

To oversee the process of evaluation and decision-making on the varieties, MAFF and GDA will establish a national variety release committee and national variety list.

2.4.New variety protection of plant

Cambodia is a country as WIPO member and the law of protection of new variety of plants as a form of IP is an important stimulus to private investment in plant breeding. mostly contents of law is comply the UPOV convention 1991.

2.5. Transgenic varieties

The law on Bio-safety enacted in 2006 and ministry of environment is a authority to monitor and evaluate the transgenic varieties.

2.6. Seed production and supply

Seed production will be mostly for rice and other field crops such as maize, cassava and grain legumes. These crops will be subject to registration in the national list of variety and they shall also be eligible for certification. Mostly seeds of hybrid maize and vegetable crops will continue to be imported .

2.7. Training and extension

Lack of awareness among farmers and stakeholders about the importance of varieties and quality seeds has been identified as a major constraint in the development of a market-driven seed industry. For this reason, these topics must be given a high priority in extension campaigns by MAFF. MAFF in collaboration with other concerned institutions will encourage and support the

inclusion of materials relating seeds and the seed industry in the curricula of all academic and vocational institutions to increase knowledge, understanding and awareness of the subject among the next generation of agriculturalists.

2.8. Seed import and export

Cambodian farmers should have access to seed of the best available varieties to increase their productivity and exploit new market opportunities. As noted above, almost all seed of hybrid maize and vegetables are imported and this situation is likely to continue for the short to medium term. For this reason, it is necessary that the technical and administrative procedures for importation are well coordinated and user-friendly to minimize the use of unofficial channels. The imported seed to Cambodia must comply with phyto-sanitary requirements and with the published standards for seed quality and be correctly labeled in the Khmer language.

2.9. Regulation of the seed industry

The primary purpose of regulatory framework is to raise the standards of seed and varieties in the market and to protect farmers and other stakeholders against deliberate fraud. It must reflect the availability of resources to implement specific procedures and will be introduced progressively as the seed industry develops and evolves. The priority areas for regulation are seed quality standards, registration of varieties and the procedures for seed certification.

2.10. Financing of the seed industry

One important goal is to establish a financially viable and market-driven seed industry and most of the investment should come from the private sector when they identify profitable business opportunities. The role of the public institutions is to create a secure and favorable climate for private investment and to use public funds in the most effective way to support this objective. To promote sustainability, the private sector should be mostly responsible for production and marketing of seed but should collaborate with the official extension services to develop the market.

2.11. Environmental considerations

The use of improved seed and varieties can bring significant gains to farmers and has no adverse effects on the environment. The only potential risk may arise from the use of chemically-treated seed and these should always be correctly labeled with a warning to avoid misuse. Maintaining genetic diversity within agriculture is a key element in making farm ecosystems more resilient, particularly with the threat posted by climate change.

2.12. International cooperation and networking

MAFF as the national institution responsible for seed management needs to participate in all relevant regional and international organizations to keep up to date with developments in the global seed industry. Cambodia needs to harmonize its seed regulations to facilitate trade and this may apply within the ASEAN Economic Community. Considering, that Cambodia already has close trading relations with its neighbors, this trend will impact on the development of the national seed industry and should be closely monitored by the national seed council.

3. Priority actions of seed industry

To support the implementation of law on seed management and plant breeder's right including promoting the development of seed industry as follow :

✓ Make more declarations under law and providing awareness to involved persons of seed business of for effective implement.

Strengthen the legal persons as (1) seed management unit (2) national seed council (3) national variety release committee and (4) seed testing laboratory

✓ Continue capacity building of relevant institutions and human resources related legal, technical, administrative and research in line with standards regional and international practice as (1)seed quality assessment (2)seed inspectors (3)seed enforcement (4)DUS test examiners (5)seed production and distribution system

✓ Improve facilities in stations/experiment farms related the seed quality control and DUS testing

✓ Support strongly funds to achieve the short , medium and long terms of seed industry.