

regulations for implementation. The Department of Plant Protection and Sanitary and Phytosanitary is under-staffed and lacks capacity. The General Directorate of Agriculture (GDA) hasn't put in place a national traceability system yet. This hinders farmers –smallholders especially- from being certified for national standards, let alone for export.

- **Climate Change risk:** Climate change is expected to affect Cambodia's GDP by nearly 10% by 2050 (WB, ADB 2021). Agriculture, by its very nature, is heavily affected by climate change. Increased drought and irregular and heavy rainfall affect particularly the two selected value chains of cashew and pepper, by drastically reducing the yields and quality of production. In 2022, almost 40% of cashew nut production was lost due to heavy rain falls followed by drought²². (Cashew Associations, 2022) Climate risks and vulnerabilities are not yet systematically taken in account in the agricultural sector. The Programme Budgeting mechanism does not include specific targets for climate adaptation and mitigation, linked with the Nationally Determined Contributions (NDC) and land degradation neutrality targets. Universities have limited R&D capacity on climate-resilient techniques and insufficient interactions with the private sector for applied research.
- **Limited socio-economic inclusion:** Smallholders are predominately informal and self-employed, without access to social protection schemes. They face vulnerable working conditions and are prone to falling into poverty in case of shocks. Their livelihood are exposed to price fluctuations and climate-related risks.. Gender equality also remains a key challenge in rural areas of Cambodia. More than 65% of women in Cambodia are farmers, and over 50% of them are smallholders²³. Women work longer hours than men as they carry out agriculture activities in addition to their childcare and family responsibilities. At the same time they have low access to land, advisory and financial services, markets, and advanced technology²⁴. As a result they have low labour productivity and less economic opportunities leading to poor access to quality food.

(ii) Low productivity

- **Smallholder farmers productivity:** Key constraints to increase smallholders' productivity include: knowledge of agro-ecological and modern farming and post-harvest techniques, access to quality inputs and equipment, affordable financing, and reliable markets.
- **Agricultural Cooperatives (ACs):** MAFF extension services are limited. Since over 10 years, ACs have played a critical role in providing extension services to smallholders. However, their capacity is insufficient to support farmers effectively towards modern and climate-resilient agriculture. Most of the 1,251 ACs in Cambodia do not operate as business entities yet and lack governance structures and capital investment to scale up services to members. As a result, ACs have difficulties to access financing and secure markets for their members.

(iii) Lack of local value addition

- Cambodia can produce sizable quantities²⁵ and very good quality of pepper and cashew nuts. Unfortunately, only a fraction (i.e. less than 5%) of those two crops are locally processed. The overwhelming majority is exported raw for a fraction of the price to neighbouring countries, via informal cross-border trade. These two products are therefore not known widely by international consumers as Cambodian-made products. This represents a substantial financial loss for the country in terms of revenue, and it's a lost opportunity for other related industries and support services. Despite high production costs (electricity, and logistics), Cambodian-made products could have an added value, and therefore be sold at a premium price, if they can meet consumers' preferences for organic and fair-trade products. This requires strong investments in terms of quality standards (including social and environmental due diligence), trusted certifications, innovation to penetrate regional and high-value markets, such as ASEAN and the EU. Unfortunately, local **MSMEs** are constrained by lack of knowledge, know-how and capital to tap into

²² This climate impact has led to some maladaptation practice, such as the inadequate over application of flowering induction hormones to cashew nut trees in some areas. Late rains also affected other commodities such as pepper that experienced a longer harvest, but hampered post-harvest operations such as drying.

²³ Parliamentary Institute of Cambodia. 2018. The Important Role of Cambodian Women in Agriculture.

²⁴ EUD internal gender analysis in agriculture

²⁵ Cashew: 691,434 Mt million tonnes; Pepper: 21,434 Mt (cashew and pepper association and federation reports 2022)