

Potato Value Chain Study/Executive summary

Ethiopia has a very high potential for potato production as its 70% arable land or >6m ha is located in the mid and high altitudes, which is suitable for potato production. Close to half of the country's current potato production comes from Amhara region.

Potato is an important food security and a hunger reliever crop in Amhara region and in several other parts of the country. This by virtue of its ability to mature in advance of most other crops, in particular grain, at the time of critical food need, mainly from September until November. During these months, late blight prevented the production of potato. However, with the availability of late blight resistant varieties in the highlands, potato can now be grown during the long rainy season. This not only has the potential to eliminate the September–November period of food shortage, it has provided potato producers an income from the sale of ware potatoes during this period (FAO potato VC manual, p. 48). Furthermore, potato has a wide flexibility in terms of the time of planting and harvesting, and can be harvested and consumed before the crop is fully mature. In addition, potato can be planted in various multiple cropping systems because their short and highly flexible vegetative cycle fits well into that. The grow cycle of potato is relatively short, around 100 days, depending on the variety and the local climate conditions.

In addition, potato produces more food per unit area than any of the other major food crops. This is illustrated by the fact that potato accounts for approximately 3.5% of the area devoted to the world's four main food crops, but contributes some 14% of the share of food production. The production of dry matter and protein from potato is significantly higher than other food crops such as wheat, rice and maize. From a food security point of view it is important that potatoes produce more nutritious food more quickly, on less land and in harsher climates than most other major crops. Up to 85% of the plant is edible human food, compared with around 50% for cereals (FAO potato VC manual).

Market opportunities are emerging for potato as a popular source of affordable food for growing urban populations. Finally, potato is not prone to speculative commodities trading on global markets; instead, prices are more likely set by local supply-and-demand conditions. Yet, potato has long been regarded as a subsistence crop and is still one of the underexploited food crops with a huge unrealized potential to improve food security, income and human nutrition (source: EIAR report).

Also in Ethiopia, there is a growing interest in the potato crop by private investors and policy makers. Cultivation of potato is rapidly expanding to irrigable areas. For instance, in Koga irrigation project, out of the total 5,060 ha of land covered by different crops, 2042 ha (41%) is entirely covered by potatoes and a total production of around 40,000 tons of potato's is expected (source: EIAR and ARARI, 2013, "Seed Potato Tuber Production and Dissemination Experiences, Challenges and Prospects", Proceedings of the National Workshop on Seed Potato Tuber Production and Dissemination, March 2012, Bahir Dar, Ethiopia ISBN: 978-99944-53-87-x).

Seed potato supply has, as yet, not been taken up by the seed companies and has thus overlooked in the formal seed system. Consequently, the informal seed system still reigns in much of the country. Due to the gap in seed quality control, the incidence of diseases as bacterial wilt and late blight has become serious and needs due attention. As quality control and certification is weak, farmers are not very interested in paying high(er) prices for seed potatoes because they cannot be sure that they are getting the genuine product.

National average yields of 8t/ha are still far below attainable yields which are as high as 45 tons/ha for the improved potato varieties. At regional level (ANRS) average yields of 12-13 ton/ha for rain-fed to 20 ton/ha for land under irrigation have been reported (source: EIAR and ARARI, 2013, "Seed Potato Tuber Production and Dissemination Experiences, Challenges and Prospects", Proceedings of the National Workshop on Seed Potato Tuber Production and Dissemination, 12-14 March 2012, Bahir Dar, Ethiopia ISBN: 978-99944-53-87-x).

Another constraint in the VC is that farmers are, for various reasons, not applying the recommended Good Agricultural Practices (GAP). Furthermore, because of lack of adequate storage facilities, packing

and processing facilities, post-harvest losses are significant (estimates by different sources/informants vary a lot). Some processing has been started up but still at a limited scale and it still has to be seen whether consumers are interested in buying the processed products.

As for most of the agricultural value chains, women do participate in the cultivation but are much less involved in decision-making and sale (except for some retailing).

Potentially potato can generate more employment in the farm economy than other crops and serve as a source of cash income for low-income farm households through access to higher value markets along the potato value chain.

