Area-based Assessment of Agricultural Social Sustainability: A Case Study of Ban Thap Sub-district, Mae Chaem District, Chiang Mai Province

Abstract

In this research, we report on a test application of the Sustainability Assessment of Food and Agriculture Systems tool (SAFA), developed by the Food and Agriculture Organization (FAO) of the United Nations for analyzing sustainability principles and practices throughout an agricultural supply chain, including production, processing, distribution, and marketing. In this case, we applied the social sustainability component of the tool to the maize monoculture value chain and the integrated farming supply chain in the Ban Thab sub-district, Mae Chaem District of Chiang Mai province in Northern Thailand. This is a highland area during a rapidly expanding peasant farmer boom in maize production for the national and global livestock feed industry that has been widely blamed for forest encroachment by peasant farmers and air pollution from the annual burning of maize fields.

The result showed social sustainability on the maize supply chain as for the theme "S1 Valuable livelihood", the final rating is moderate (caution), reflected in dark green indicator (right to quality of life) and green indicator (fair access to means of production) and two unacceptable indicators (wage level and capacity development). The theme "S2 Fair Trading Practices" assessment shows unacceptable practices in red for both indicators. Non-economic institutions, particularly social institutions, were disrupted through predatory commercial practices. It is important to note that the cultivators have no right or freedom to bargain because of the tight linkage between the credit market system and the outputs market. The theme "S3 Labor Rights" depicts compliance with employment laws and regulations and workers working for animal feed companies. The rating of the theme "S4 Equity" which emphasizes non-discrimination, gender equality, and supporting vulnerable people, is dark green. Like the themes S3 and S4, the rating of "S5 Human Health and Safety" is also dark green, reflecting the excellent implementation in both sub-themes: workplace safety and

health provisions for employees. The total rating for the theme "S6 Cultural Diversity" is unacceptable, resulting from both unacceptable indigenous knowledge and food sovereignty practices and conditions. On the one hand, there is no evidence that local knowledge is utilized in maize production.

While the result social sustainability on the integrated farming supply chain as for the theme "S1 Valuable livelihood", the final rating is good reflecting in two dark green indicators (right to quality of life and fair access to means of production) and one unacceptable indicator (capacity development). The theme "S2 Fair Trading Practices" assessment shows the excellent implementation in both sub-themes: responsible buyers and rights of suppliers. Nevertheless, the rating of the theme "S3 Labor Rights," "S4 Equity," "S5 Human Health and Safety" did not assessment, because there is no employment in integrated farming. The theme "S6 Cultural Diversity" the final rating is dark green, reflecting the excellent implementation in both sub-themes: indigenous knowledge and food sovereignty.

Recommendations for achieving social sustainability in the maize and the integrated farming supply chain should focus on S1 Valuable livelihood, especially the lack of incentives for the younger generation to continue such farming. Moreover, it should focus on S2 Fair Trading Practices on the maize supply chain to solve the tight linkage between the credit market system and the outputs market and S6 the lack of cultural diversity.

Key Word: SAFA tool, Maize monoculture, Integrated farming, Sustainability, Social well-being