**ABSTRACT**

Bhutan is a poor country with 51% of the population employed in agriculture, and little manufacturing. Forests account for 71% of Bhutan, and agriculture 8%. The average landholding is 1.4 hectares per household. Many farmers practice ‘traditional’ farming using forest litter and farm yard manure. The inputs for chemical agriculture (synthetic fertilizers and pesticides) are generally imported and expensive. Bhutan announced a goal of 100% organic agriculture in 2006. Looking after the environment and animal welfare, and not poisoning insects and other living things are precepts congruent with Buddhism, the national religion of Bhutan. So, organic agriculture appears to be a ‘good fit’ for Bhutan. Yet, nearly two decades after declaring the 100% goal, there appears to have been near zero progress based on the parameter of certified organic agriculture. Longitudinal data of organic agriculture hectares for the past two decades reveal that the goal of 100% appears to be wishful thinking, with the reality of 1.09% organic agriculture. In the meantime, a neighbouring Indian state of India, Sikkim, with many geographic, climatic and demographic comparables, has achieved its goal of 100% organic. Sikkim is a blueprint of how to achieve 100% organic, while Bhutan is a blueprint for how not to (so far).

**Keywords:** Certification, goal setting, Himalayas, India, organic farming, organic food, planning, Sikkim.

I. **INTRODUCTION**

Bhutan attracted attention and excitement with the declared goal of achieving 100% organic agriculture by 2020. In 2006, the Ministry of Agriculture of the Royal Government of Bhutan declared that: “Bhutan could become the first country in the world to become ‘organic’ by 2020” (Tshomo & Dorji, 2006, p. 17). The following year, this was reiterated: “Bhutan’s vision is to develop organic farming as a way of life and become fully organic by 2020” (Duba et al., 2007, p. 4). At the time, certified organic agriculture accounted for 0.01% (61 ha) of the total agricultural hectares of Bhutan (FiBL, 2023). By any measure, the goal was ambitious.

Bhutan is a landlocked mountainous country in the Himalayas. It is sandwiched between India and China. It boasts a Gross National Happiness Index (GNH) (there are no comparables). The Gross National Income (GNI) is US$2,970 per capita (IFAD, 2021).

The country is mostly poor and agrarian. The population is 778,000. The country is 71% forest and 8% agricultural land, with 3% cultivated (IFAD, 2021). The average household land holding is 1.4 ha (IFAD, 2021). Much of the farming is subsistence farming. There is reliance on “forest litter and farm yard manure” (FYM) (Tshomo & Dorji, 2006, p.14). Bhutan depends on food imports for more than 50% of its food (IFAD, 2021).

II. **METHODS**

The present paper draws on the foundational documents of the Royal Government of Bhutan expressing the aim to be a 100% organic country by 2020 (viz. Duba et al., 2007; Tshomo & Dorji, 2006), subsequent commentary, and the longitudinal data of certified organic agriculture in Bhutan (FiBL, 2023).
III. RESULTS

The Prime Minister of Bhutan declared in 2006 in the ‘National Framework for Organic Farming in Bhutan’ (NFOFB) that:

"We have the right production environment, both physical and socio-cultural. In our endeavour ... we will take advantage of our gifted physical environment, the socio-cultural, technological and spiritual environment that favours the development and progress of organic farming in Bhutan ... Let organic farming be our symbol of healthy living with nature and respect for all sentient beings while harnessing a good profit." (Sangay Ngedup in Tshomo & Dorji, 2006, p. 3)

The 2006 National Framework claimed that it:

“... outlines key approaches and strategies to promote Organic Farming ... provides a vision of the increasingly important role Organic Farming will play in the future development of agriculture in Bhutan ... identifies the many benefits and advantages of Organic Farming as well as some of the key challenges.” (Sangay Ngedup in Tshomo & Dorji, 2006, p. 4)

When the ambition to become the world’s first 100% country was mooted (in 2006 and 2007), certified organic agriculture accounted for just 0.01% of agriculture in Bhutan (61 ha in 2006) (FiBL, 2023). Subsequently, certified organic agriculture peaked in Bhutan in 2015 at 6,950 hectares, accounting for 1.32% of agriculture in the country. Since then, certified organic agriculture has slipped to 5,608 ha, 1.09% of Bhutan’s agriculture (in 2021) (Fig. 1).

The National Framework recognised the need for: “Research to establish the most effective organic farming techniques for Bhutan” (Tshomo & Dorji, 2006, p. 34), noting that: “organic farming requires … research programmes” (Tshomo & Dorji, 2006, p. 41). The foundational documents of the 100% goal each identified the need for research to manifest the goal (Duba et al., 2007; Tshomo & Dorji, 2006). A search of the global database of organics research revealed that there are no submissions from Bhutan (up to 01 July 2023) (orgprints.org).

The National Framework claimed that: “Farming in Bhutan is still very traditional with little or no use of external inputs” (Tshomo & Dorji, 2006, p. 9). The same document makes the rather odd and incongruent (even contradictory) statement that: “In the short and medium terms, conventional production techniques are anticipated to encompass the majority of production systems in the Kingdom” (Tshomo & Dorji, 2006, p. 25).

The National Framework stated that: “Organic development should start with medicinal and aromatic plants, non-timber forest products from the wild collection and selected crops and areas in the geographical areas where conventional agriculture has not yet introduced agrochemicals, and start by supporting the development of potential niche crops in selected potential areas” (Tshomo & Dorji, 2006, p. 25). Elsewhere, the National Framework states that: “Conventional farming areas with limited use of agrochemicals should be designated as organic farming areas” (Tshomo & Dorji, 2006, p. 27). To the extent that there was a plan, it seems to have been somewhat muddled from the outset.

The Ministry of Agriculture document ‘Promoting Organic Farming in Bhutan’ followed closely on the
heels of the National Framework document. It claimed that: “Introducing organic farming in Bhutan should be a convincing policy action, simply because already farms in Bhutan operate within the broad principles of organic farming with a few exceptions” (Duba et al., 2007, p. 7).

The Promoting Organic document proclaimed enthusiastically: “The enormous benefit of organic culture” (Duba et al., 2007, p. 8) and that the “benefits are unlimited” (Duba et al., 2007, p. 9). There were grand claims: “Organic farming has the potential to contribute to the eradication of poverty, promote gender equality, ensure environmental sustainability, and ensure better nutrition and health” (Duba et al., 2007, p. 7).

How to document the progress towards the goal of 100% organic? It was recognised that certification is the proven solution for differentiating organic production from non-organic production and that there are various approaches to certification. Bhutan envisaged at least a two-tier model: “Certification will be mainly for the export market while local certification system will be developed” (Duba et al., 2007, p. 17).

The National Framework envisaged a national symbol for organics in Bhutan, and this was implemented (Fig. 2).

Fig. 2. The bilingual national symbol for organic agriculture products of Bhutan. (Image source: nssc.gov.bt).

It was acknowledged that: “The whole certification process is costly and time-consuming and can act as a disincentive to going organic. In terms of marketing, the small volumes from isolated pockets of production add up cost and cast doubt on business viability” (Duba et al., 2007, p.28).

The verdict is that Bhutan missed its 100% organic target by a very wide berth, despite some early optimism (Paull, 2013). It has fallen 99% short of the mark. In the meantime, it is unclear what percentage of its (largely subsistence) farmers are using (or not) synthetic inputs (fertilisers and/or pesticides) and what percentage of them are organic by default, organic by poverty, or organic by remoteness.

IV. CONCLUDING REMARKS

By the numbers, Bhutan has achieved 1.01% certified organic (Fig. 1). Perhaps the cryptic organic sector is large. The de facto organic sector, the framers too poor, too remote, or disinclined to use agrochemicals may be many, but they appear to be not counted, not measured, and not certified (either to an international or a local standard).

In 2007, the Ministry declared that: “The country dreams of becoming fully organic by 2020” (Duba et al., 2007, p. 33). Maybe, waking up nearly two decades later, we can wonder, like Alice, that ‘was it all just a dream’?

It may have been true that: ‘There is enough enthusiasm and excitement in the MoA [Ministry of Agriculture]’ (Duba et al., 2007, p. 35), but ‘enthusiasm’ and ‘excitement’ did not get the pyramids built. Perhaps enthusiasm and excitement are necessary, but they are certainly not sufficient.

Bhutan seems to have fallen foul of the maxim: ‘Failing to plan is planning to fail’. The rationale for Bhutan’s aspiration to be the first 100% organic state remains a sound and worthy aspiration. However, if the aspiration is to manifest, then a ‘gear-change’ in strategy is required. The present strategy, if any, appears to be producing no results to brag about.

Globally, there are 191 countries that report organic agriculture, with a total of 76.4 million hectares, 3.7 million producers, and an annual market value of €125 billion (Willer et al., 2023). At 1.09% organic, Bhutan scores at less than the global total of 1.6% organic. No country has yet achieved 100% organic, and for Bhutan to achieve it, there are 73 countries to leapfrog, each of which reports a higher percentage of organic agriculture than Bhutan (Willer et al., 2023).

Consumers are recognised as one of the key stakeholders for the uptake of organics, however: “The consumers within the country are by and large indifferent to organic products because of several reasons, the most important being ignorance and a general lack of awareness on organics” (Duba et al., 2007, p. 29). Without the education and enlistment of the two core stakeholders, consumers and producers, into
the 100% goal, it seems unlikely that the goal can ever move from dream to ‘reality’.

Meanwhile, neighbouring Sikkim has achieved the 100% organic milestone (Chamling, 2010; Chief Minister's Office, 2016; Paull, 2017). India’s Himalayan hill state of Sikkim is a territory geographically adjacent to Bhutan. Sikkim and Bhutan share comparable climates, populations, demographics, and a common border. Sikkim offers a ready exemplar for Bhutan to emulate.

The advice applies: Find out what works and do that; find out what doesn’t work and don’t do that. Specifically, if Bhutan’s aspiration of being the first country to be 100% organic is to be realised, then determine what Sikkim has done and replicate that, find out what Bhutan has done, and cease doing that.

Two years after the missed target, it was still claimed that organic agriculture “is appropriate for Bhutan and organically produced food has become a high priority for the government” (Tashi, 2022). Another account reports the 2020 goal as reset to 2035 (Dema, 2020).

Sikkim offers a ‘gold standard’ model for how to convert a territory to organic (SOM, 2014). Besides following the lead of Sikkim, multiple other organic global leaders can offer valuable lessons for the uptake of organics (Paull, 2016). Wishful thinking will not achieve Bhutan’s goal of 100% organic; without action, the ‘goal’ will remain just some happy daydream and unhappy braggadocio. Meanwhile, the goal of 100% organic for Bhutan remains a worthy goal.

CONFLICT OF INTEREST

The author declares no conflict of interest.

REFERENCES


