THE SIKKIM INDIAN STATE 100%ORGANIC AND ITS STRATEGY TO ENSURE SUSTAINABLE ECONOMIC OPPORTUNITIES FOR FARMERS

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Sikkim is an autonomous state of India, with a population of around 610,577 local inhabitants, <u>officially recognized by FAO</u> <u>and other relevant international</u> <u>organizations</u> for its 100% organic production. Sikkim provides a reference point for countries seeking to implement comparable approaches.

The Hindu Kush Himalayan (HKH) region spreads over an area of 3,500 kilometres, encompassing over eight countries. Sikkim is located in northeast India, on the border with Bhutan, Tibet, and Nepal. It is part of the Himalayas, and forests, pastures and steep mountainsides make up most of Sikkim's fragile ecosystem. The area constitutes a precious reservoir of water and

provides fresh water to 1.9 billion people, thanks to its natural basins. But the area is also crucial for the ecosystem services provided, which ensures livelihoods to a population of around 240 million people. Hillside terraces are filled with crops like: Red rice, Buckwheat, Tumeric, Large cardamom, Dalle Khursani (the fiery cherry pepper).

In Sikkim only about 10% of the land (75,000 hectares) is farmed. Agriculture productivity in Sikkim is linked to the few sources of perennial irrigation. Only 15% of the agricultural land is irrigated. Sikkim agriculture is mainly rainfed. The mountains are difficult terrain to cultivate in, terrace cultivation requires constant maintenance. Roads are few and narrow, making it difficult to reach markets for inputs. Because of these factors, Sikkim farmers never used many chemical inputs, there was little accessibility to such inputs and hence low awareness.

Across the years Sikkim made huge progresses in organic agriculture with the aim to become the first Indian state fully organic, having turned these limiting factors to be a plus in the development towards a totally organic state. This way, even if the productivity of the Sikkim farms remained low, the value of its crops would increase, becoming a low-volume-high-guality agriculture state.

The shift from conventional to organic farming begun in 2003, when the government initiated a state-wide strategy and thanks to the Sikkim Organic Mission (2010), an action plan defining the measures to implement in order to reach the target of converting the entire state to organic. By 2016 the country is said the first 100% organic state in the world. <u>The UN Food and Agriculture</u> <u>Organisation conferred an award to Sikkim for this achievement its</u> <u>Public Policies in 2018</u>. By Kim Assaël









Sikkim has received many other global recognitions from international organizations for its pioneering organic initiatives, further strengthening its position as a model for sustainable agriculture.

As also documented by <u>Vartoch Organic, a Sikkim-based wellness</u> <u>brand, main aspects of the country strategy have included:</u>

- Organic certification: all agricultural produce from Sikkim carries organic certification, ensuring quality and authenticity. Certification was seen as a crucial part of the transformation, 80% of the budget between 2010 and 2014 was used to build the capacity of farmers, rural service providers, and certification bodies and to support farmers in acquiring certification. The role of the Sikkim State Organic Certification Agency (SOCA) in conjunction with the 2024 Programme for Organic Production (NPOP) is a cornerstone of the organic farming movement in Sikkim. Through certification, monitoring, and farmer support, SOCA has helped establish Sikkim as a global leader in promoting sustainable agricultural practices. The state's organic certification has not only improved environmental conditions but also created new economic opportunities, fostering the growth of a greener and more sustainable agricultural market.
- Agricultural support policy: specific local policies promoting organic farming have played a crucial role in Sikkim's transformation. Measures were undertaken to supply farmers with quality organic seeds, such as the strengthening of local organic seed development and production.
- **Sustainability**: the policy focuses on enhancing soil fertility, preserving water quality and increasing biodiversity at the field and landscape level. To improve soil health management, the government has provided support for farmers to perform 40,000 soil tests per year. The results are delivered in the form of Soil Health Cards, which give nutrient status and recommendations on inputs.
- **Financial incentive**: the state provided financial and technical assistance to farmers to ensure smooth adoption of organic methods. The farmers who adopted organic practices have received economic incentives, including grants for the purchase of equipment and resources for organic certification.
- Education and Awareness: Farmers were trained on the benefits of organic farming and ecological cultivation techniques.
- **Market Access**: The government created infrastructure to help producers sell their organic products both locally and internationally.

The Sikkim's Conversion strategy and policy framework implemented in the process towards 100% organic agriculture has had specific features. The phasing out process of banning chemical fertilizers completely. It was a gradual implementation of the phase-out of chemical fertilizers, undertaken during a decade, from 2004 to 2014. The conversion strategy had involved training farmers in how to produce organic inputs such as compost, vermicomposting and organic pesticides using local plants. During the first pilot phase of the mission (2003-2009), more than 100 villages with 10,000 farmers in all four districts of the state benefited from these training programmes.

Another important winning aspect of the strategy was that the government has been able to supply enough organic fertilizers, or import sufficient soil nutrients to satisfy farmers' requirements, before banning agrochemicals. The policy has combined mandatory requirements, such as those concerning chemical fertilizers and pesticides with support and incentives to build a holistic



transformation of the whole Sikkimese food system. The government had put in place many supports, too, a cow per family, one government job for each family, and sufficient ration distributed through the public distribution system. All these helped the farmers to absorb the shock of lower production in the initial years when the soil had to be treated to become suitable for organic farming.

As reported into the "Organic Without Boundaries" blog by IFOAM Organics international, all of its farmland is today certified organic. The World Future Council reports the conversion of 76,000 hectares to organic farming, including training, infrastructure, regulatory, and certification measures and as a socio-economic impact: agricultural well-being, education, health, tourism (+50% between 2014–17), youth employment.

The Sikkim government continues working towards popularizing homestays. It also ensures that the "100% organic" certification reaches all its farmers, thus enabling organic Sikkim to bring tangible benefits to its population.

The Sikkim tourism sector has benefitted greatly from the state's transition to 100 per cent organic as the number of tourists increased by over 50 per cent between 2014 and 2017, is said in the recognition of the FAO'S Future Policy Gold Award. An in-depth analysis of the long conversion process is available in the Study <u>The Mainstreaming of Organic Agriculture And Agroecology in the Himalaya Region</u> (2019) where is shown how the countries of the area have moved forward, even with contradictions, and how the institutional support in these countries has thus far mostly been aimed at supporting organic agriculture as a way to link farmers with international niche markets.

Sikkim's approach goes far beyond focusing solely on organic production, it also focuses on consumption, market expansion, health, education, rural development, and sustainable tourism. As such, Sikkim serves as an excellent model for other states of the Hindu Kush Himalayan (HKH) region and countries characterized by a mountain agriculture worldwide that wish to upscale agroecology. It represents an integrated system shaped by the ability of man to generate treasures from abundant local resources as well as their ability to adapt to hardships caused by the biophysical environment.

However, it must be noted that Sikkim has been able to remain organic primarily because the population has diversified its sources of income and is not heavily reliant on agriculture. Moreover, environmental and geographical factors such as those found in Sikkim (Sikkim's small size, high political will, and cohesive society), made this transition possible and must be duly considered if this is to become a viable model for other regions.

Replicating this in larger or more diverse states may be challenging, taking in duly consideration that offering pure air, water, and food is always a highly effective strategy for attracting tourists, both to Sikkim and beyond. Sikkim is not just a state, it's a statement and a tradition rooted in respect for nature.

Sikkim set an excellent example of how other Indian states and countries worldwide can successfully upscale agroecology, as reported by <u>IFOAM – Organics International.</u>



To know more

Sikkim in FAO website 2018

<u>Sikkim – The First 100% Organic State in the World! In</u> organicwithoutboundaries.bio website

Article in panorama.solutions.org

Article in Vartoch Organic, a Sikkim-basedwellness brand

Sikkim State Organic Certification Agency website

National Program for Organic Production in ssoca.in wwebsite

Guidelines for PGS Certification systems

Article in Reasonstobecheerful.world

sikkimtourism.org/sikkims-organic-revolution-a-model-forsustainable-agriculture/

Article in Indiatimes.com

Article in greenpeace.org

Article in Indian Journal of Sustainable Development

"The Mainstreaming of Organic Agriculture And Agroecology in the Himalaya Region2019

Sikkim's State Policy on Organic Farming, India

<u>Sikkim: Making of the first 100%organic state of the world, Alka</u> <u>Parikh, 2023</u>

IFOAM "Organic Without Boundaries" blog

Global organic area continues grow in UFOAM Bio News 2025





Sikkim in India officially becomes world's first **fully organic state** with zero pesticides



