Conversion to Organic Farming; Experiences from Punjab and Uttarakhand

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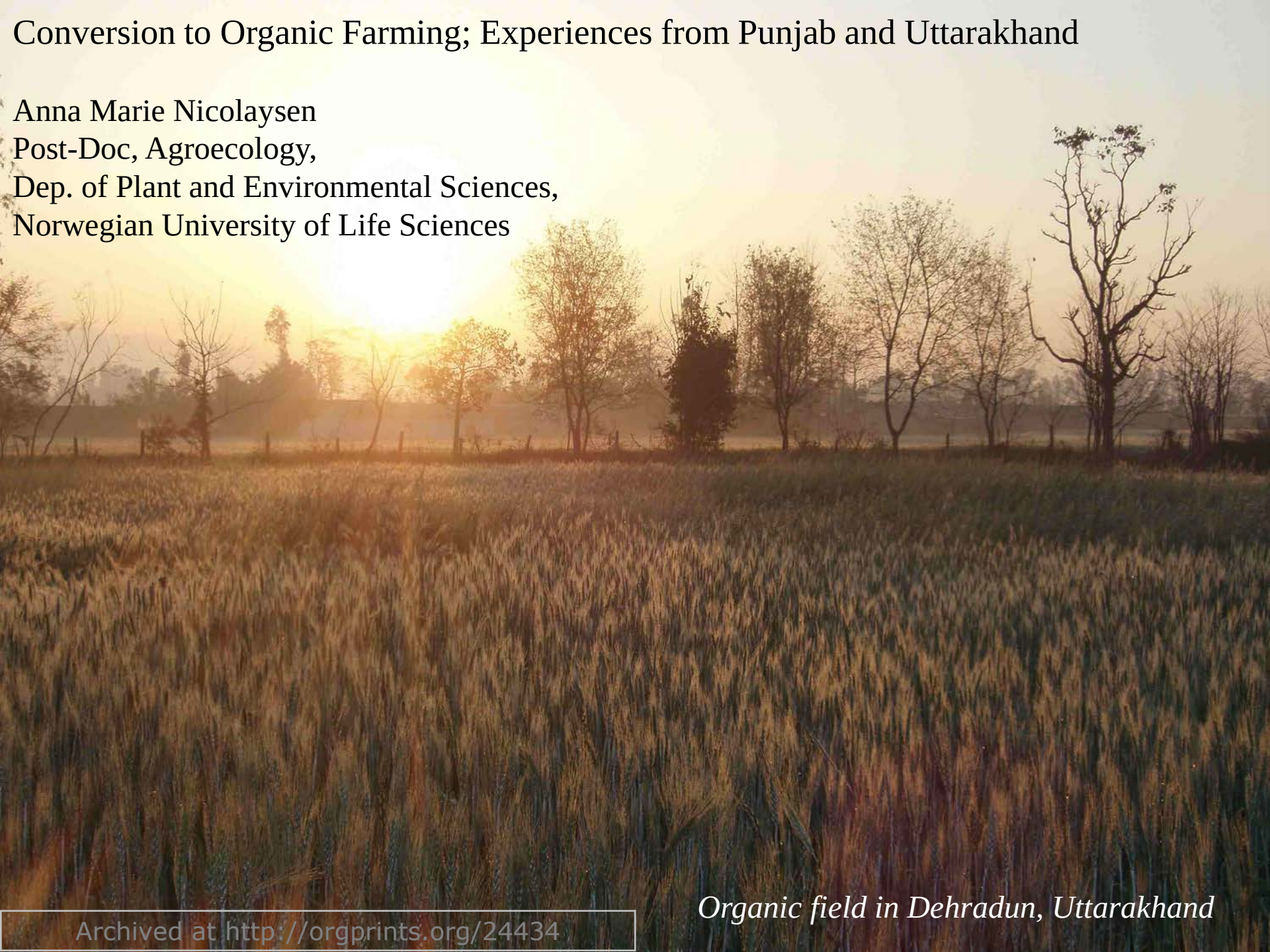


Organic field in Dehradun, Uttarakhand

Vandana Shiva, founder of Navdanya

Northeast Organic Farming Association, (NOFA), Summer Conference 2004, Vandana Shiva: The way to feed the world in the future is with the help of millions of farmers and millions of microbes in a healthy soil.

Key Research Questions

What are the socio-economic and political conditions that lead small farmers to accept an alternative model, and how and to what extent are they converting to it?

How does Navdanya, Kheti Virasat (the heritage of farming), and similar organizations work, how do they teach small farmers about organic agriculture and biodiversity conservation?

Methods

N = 250 (F 79, M 171)

89 in-depth interviews

16 Focus group interviews

Participant observation during 12 months fieldwork in 8 districts in 4 states:

Punjab: Bathinda and Patiala

Uttarakhand: Dehradun and Uttarkashi

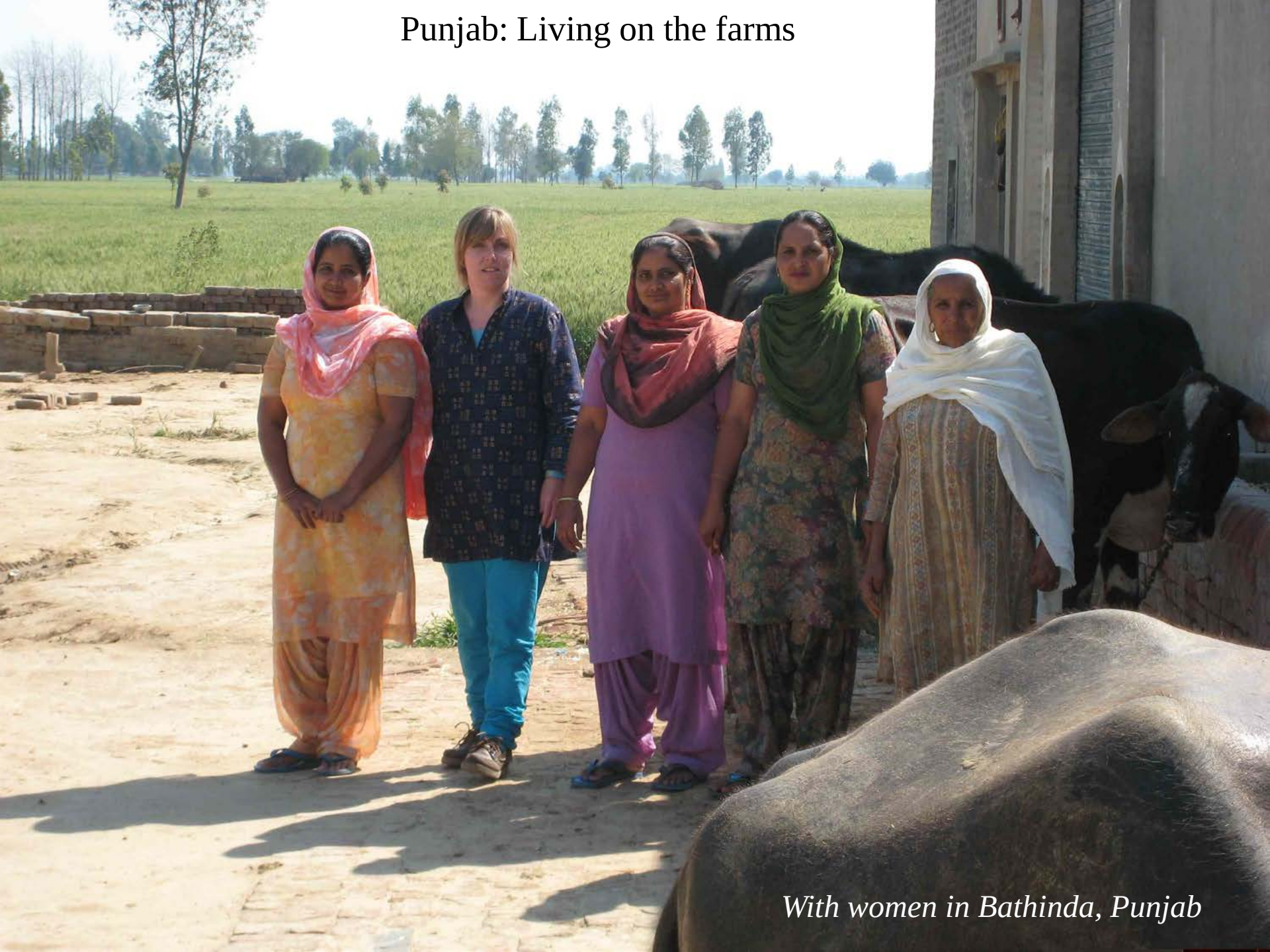
West Bengal: Medinipur and Darjeeling

Tamil Nadu: Nilgiris and Nagapattinam

Punjab: The Breadbasket of India

Firewood and cow dung is used when chapattis are prepared

Punjab: Living on the farms



With women in Bathinda, Punjab

Punjab: In-depth interview

With farm-laborer, farm-owner and translator in Bathinda

Focus group with conventional farmers in Sadharanpur, Punjab

The office of Kheti Virasat in Nabha, Punjab

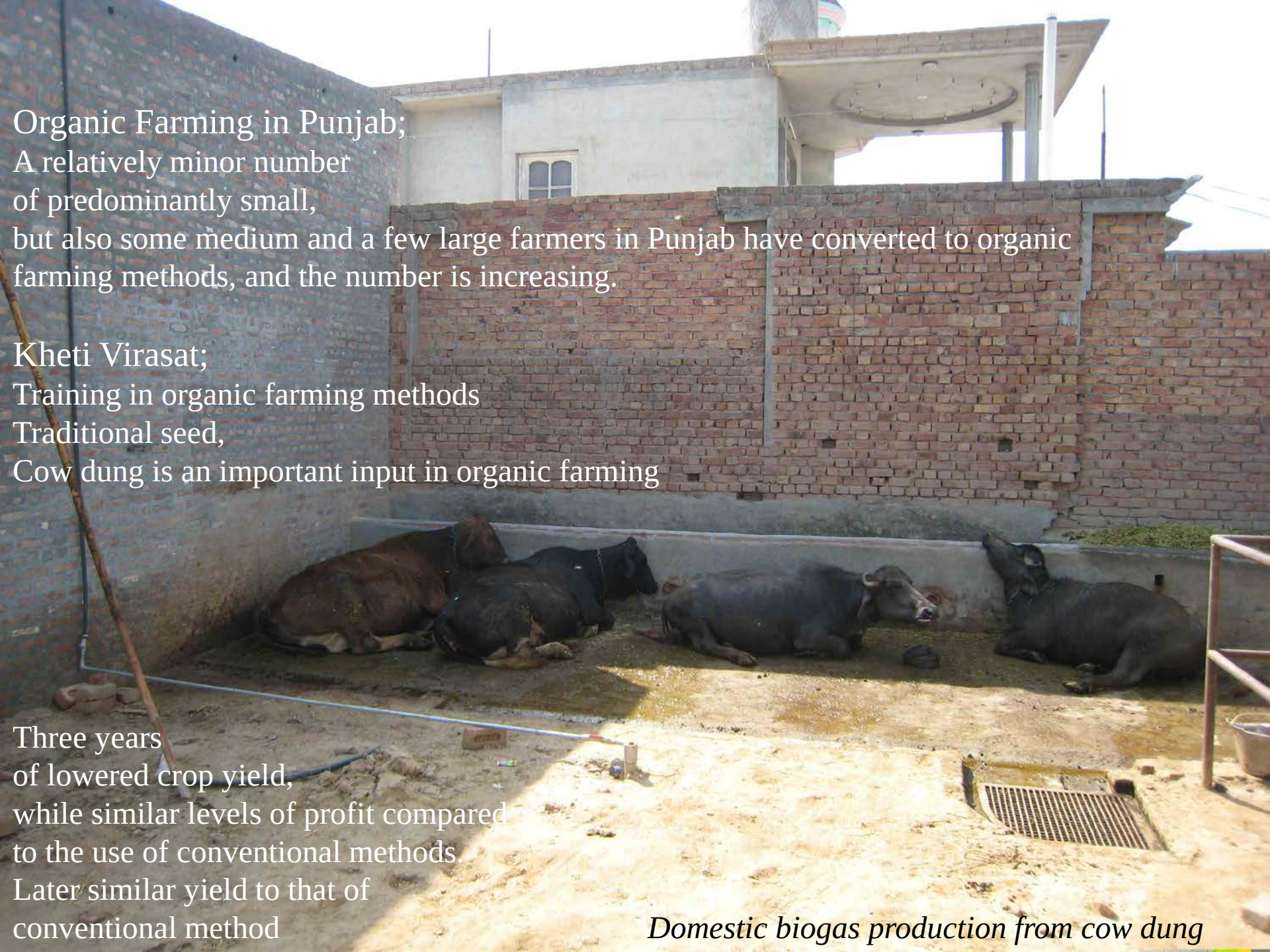
Producer's instructions for the use of pesticide at regular stages in the plant's life span

Continued a pattern of conventional farming methods (Green Revolution 1960s),

Salination, desertification, and very low water tables in an increasing number of blocks in several districts of the state.

Polluted irrigation water canal

One of the founders of Kheti Virasat, with his son and grandson in their organic farm in Patiala in front of an insect trap

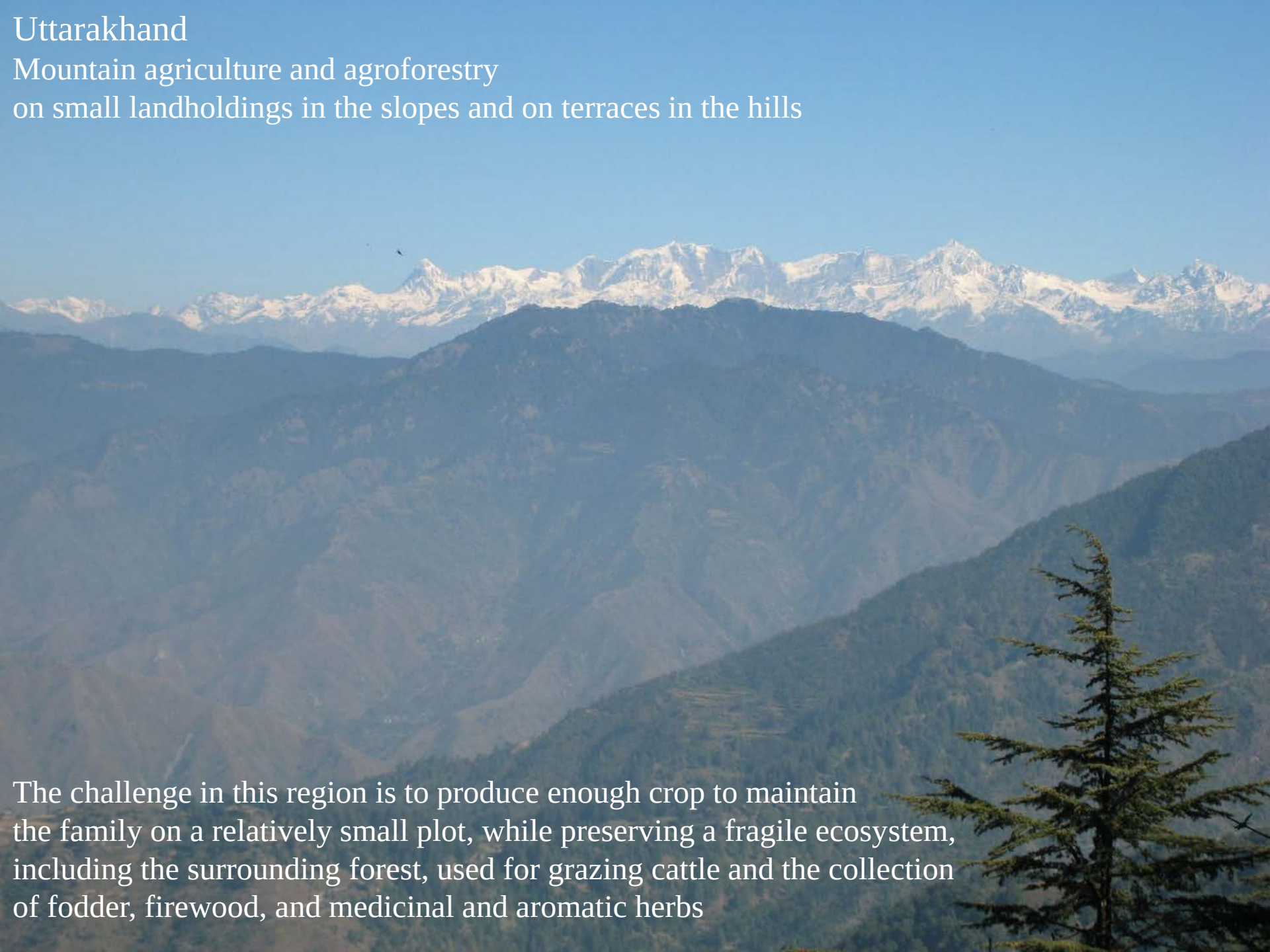


Organic Farming in Punjab;
A relatively minor number
of predominantly small,
but also some medium and a few large farmers in Punjab have converted to organic farming methods, and the number is increasing.

Kheti Virasat;
Training in organic farming methods
Traditional seed,
Cow dung is an important input in organic farming

Three years
of lowered crop yield,
while similar levels of profit compared to the use of conventional methods.
Later similar yield to that of conventional method

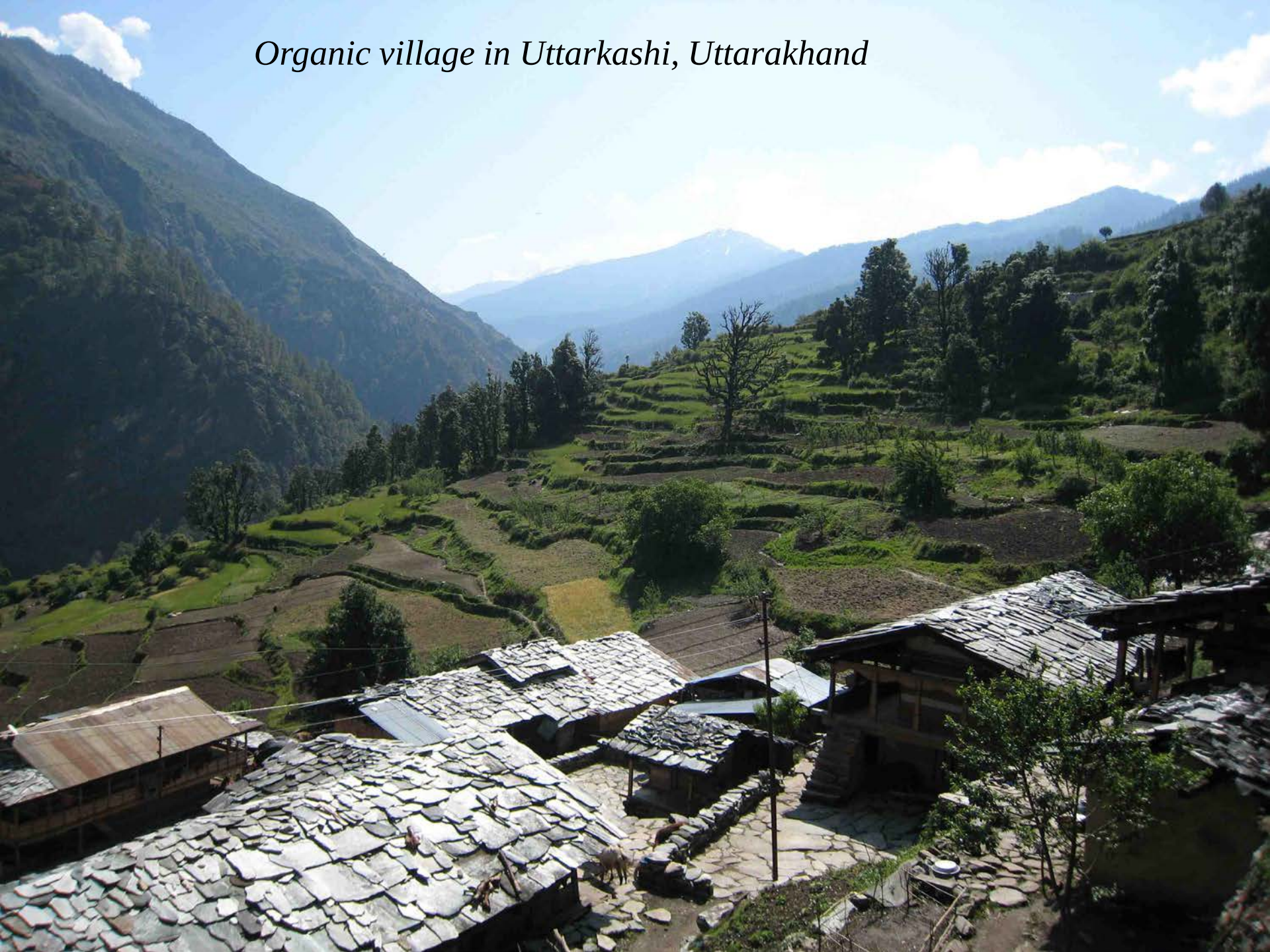
Domestic biogas production from cow dung



Uttarakhand

Mountain agriculture and agroforestry
on small landholdings in the slopes and on terraces in the hills

The challenge in this region is to produce enough crop to maintain the family on a relatively small plot, while preserving a fragile ecosystem, including the surrounding forest, used for grazing cattle and the collection of fodder, firewood, and medicinal and aromatic herbs



Organic village in Uttarkashi, Uttarakhand

The mountain areas are less developed in terms of infrastructure and thousands of villages are still not connected to a road. Many do not have access to electricity or water.

Women farmers collecting fodder for their cattle, Uttarkashi

Organic mountain farming of red rice on terraced fields in Purola, Uttarakhand

Organic vermi compost

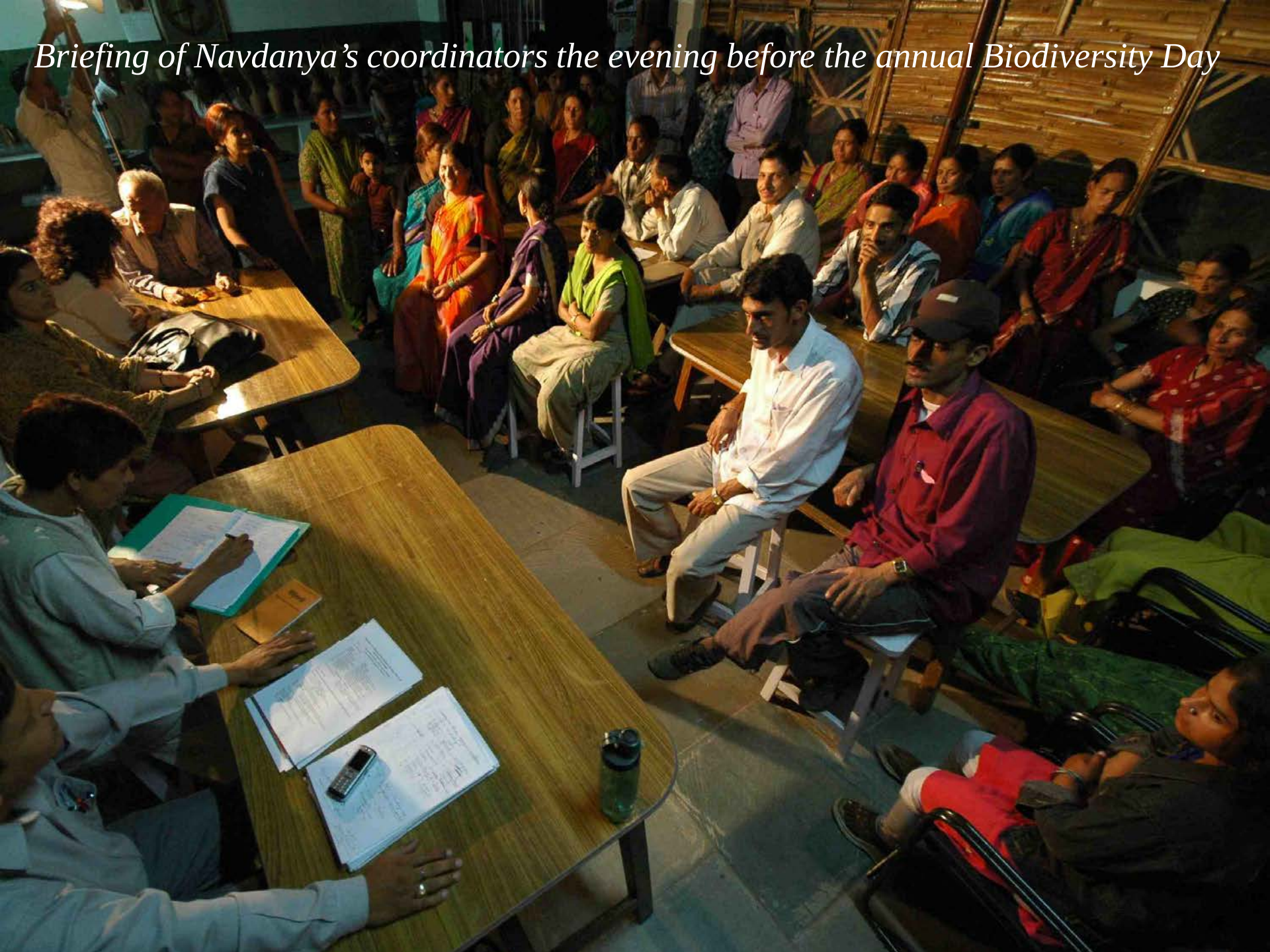
Store selling agricultural inputs, Purola, Uttarakhand

Hybrid seed, mineral fertilizers and chemical pesticides are sold and used in Uttarakhand.

The government has taken steps to encourage and support the teaching of organic farming.

Uttarakhand has a rich biodiversity both in wild plants and agricultural crops and there are ancient as well as new seed banks in use around the state.

Local farmers cultivate a number of traditional crops that are famous for their taste and quality; these include for example, red rice, basmati rice and a variety of beans, which are sold as niche produce in Delhi and Mumbai.



Briefing of Navdanya's coordinators the evening before the annual Biodiversity Day

The seed bank at Bija Vidyapeeth, Navdanya's research farm, Dehradun, Uttarakhand

Rekha, an 18-year old farmer, the youngest participant in my study.

She is standing in front of the family's seed bank.

These buildings are often heavily decorated and part of an ancient tradition.

Seed bank, Purola, Uttarakhand

Women farmers in Dehradun, Uttarakhand

Key Findings

My research indicates that if a farmer converts to organic farming from an intensive conventional system, or tries to make a living on a small holding in difficult terrain, she or he can attain a good livelihood using sustainable methods.

More importantly, the organizations that assist the farmers in this transition are crucial, because they teach the farmers new methods and give practical and moral support during a time when they feel uncertain making such a large change in how they make their living.

The combination of being economically independent, if still poor, and having control over the inputs and production methods on their farm, is really empowering.

Seed bank custodians, Uttarkashi

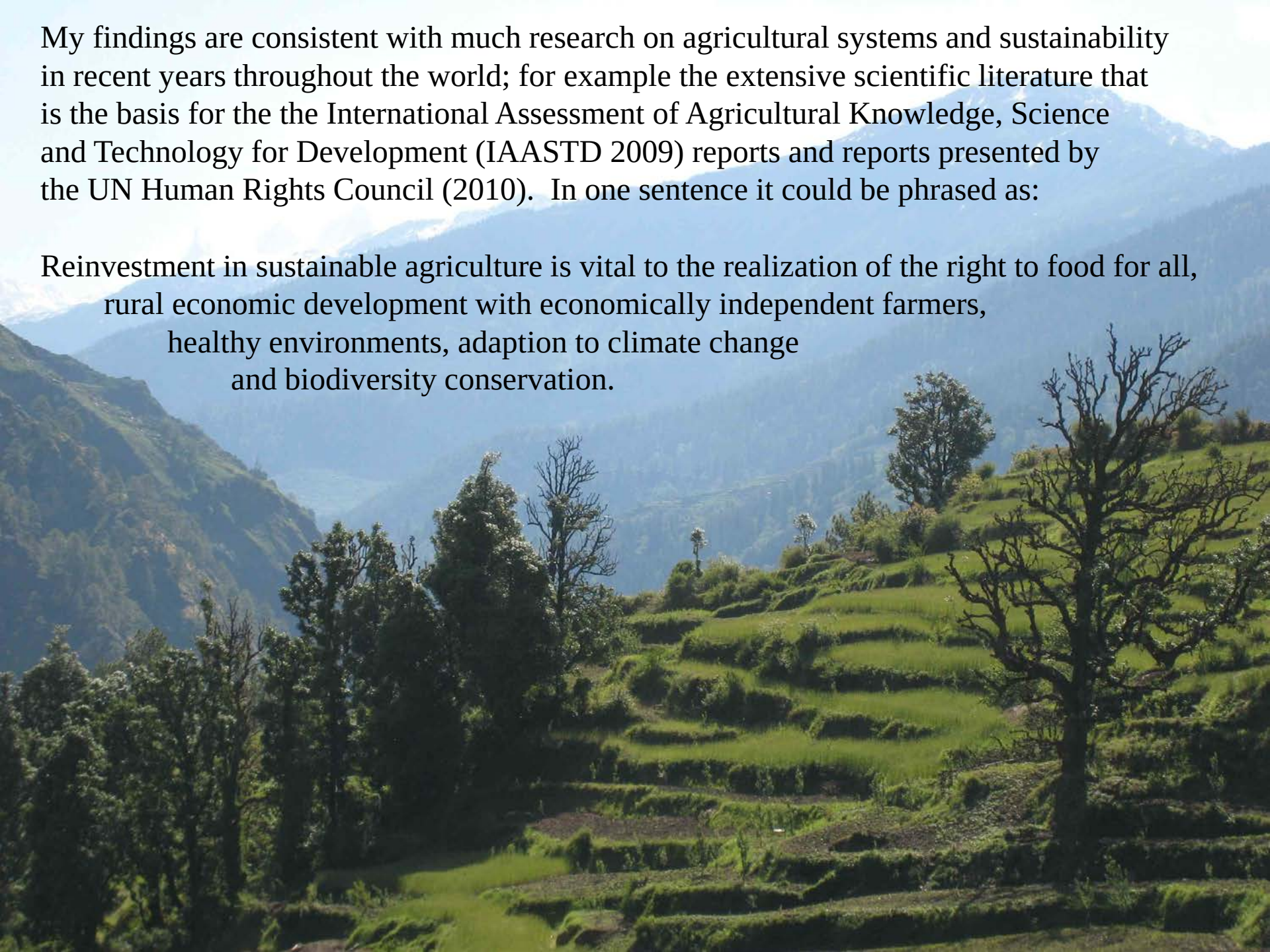
In the political struggle for greater control over the traditional means of production, the farmers also fight a cultural struggle for traditional knowledge and indigenous beliefs.

Rejecting the notion that neoliberal globalization is the only possible framework for development**,** Navdanya seeks to construct an alternative, sustainable path, where the farmers convert to organic agriculture and maintain community seed banks to protect themselves from the regime of chemical, industrial agriculture and genetically modified seed.

Navdanya proclaims the farmers' right to biodiversity, and to not cooperate with imposed intellectual property rights (IPRs) systems that make seed saving and exchange a crime.

My findings are consistent with much research on agricultural systems and sustainability in recent years throughout the world; for example the extensive scientific literature that is the basis for the the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD 2009) reports and reports presented by the UN Human Rights Council (2010). In one sentence it could be phrased as:

Reinvestment in sustainable agriculture is vital to the realization of the right to food for all, rural economic development with economically independent farmers, healthy environments, adaption to climate change and biodiversity conservation.




Questions?