

## Case study — Himmotthan

Farming systems in Uttarakhand, nestled amidst the pristine Himalayas, are mostly based on subsistence agriculture. These are integrated crop–livestock– forest systems, strongly linked to common property resources such as forests, pastures, rangelands and bio-diversity.

Livestock forms the backbone of the agro-ecosystem of the state. **Agriculture and animal husbandry are the principal occupations** and source of livelihood for over 70 per cent of the state's workforce. However, cattle within the state are usually small and underfed, with crossbreeds comprising around 5 per cent of the total population.

Practices of rearing livestock are significantly inhibited by an acute shortage of fodder and feed. Whilst the requirements of green fodder and dry fodder are 19.8 tonnes and 5.4 tonnes respectively, the current availability within the state is dismally low at 8.3 tonnes and 4.3 tonnes.

This deficit inhibits dairy development and strain improvement. In desperation, the rural folk have resorted to lopping of broad-leafed trees, leading to forest degradation.

**Himmotthan, Dehradun**, the Trust's nodal agency for **Himmotthan Pariyojana** initiated a fodder initiative against this bleak backdrop, with the aim of developing fodder resources through:



- Improved management of degraded common lands
- Introduction of improved grasses, shrubs and tree crops
- Better fodder preservation techniques
- Better feeding practices

These steps have the potential to alleviate fodder shortages during the lean period. During the year, attempts were made to develop successful models in different physiographic zones in joint collaboration with government departments and non-profit organisations, to disseminate ownership of this programme to other agencies, including the Forest Department, District Rural Development Authority and government-backed boards such as Uttarakhand Livestock Development Board and the **Uttarakhand Sheep and Wool Development Board**.

Key outputs so far include:

- Establishment of 126 village fodder grass nurseries, spread out across 19,000 sq. metres
- Production of 320 quintals of grass root slips for monsoon plantation
- Conducting training sessions at each project site, thereby training over 1,760 persons
- Soil and conservation measures including digging 37,150 metres of contour trenches and 111 percolation pits, and constructing protection walls over 1,969 metres
- Fodder plantation on common land, including 821,400 root slips of fodder grasses, 55,350 saplings of fodder shrubs, ringal and bamboo, and 47,715 saplings of fodder tree species

- Generation of employment through the participation of 1,025 households in project activities
- Development of a new technique for grass plantation besides propagating mechanisms for increased soil fertility and moisture conservation.

This project was supported by the Trust under its Small Grant Programme, and enabled **Himmothan** to evolve dovetailing mechanisms between the government departments and the non-profit organisations, besides developing efficient village-level institutional mechanisms including user groups, Van Panchayats and Gram Panchayats.



More importantly, it was felt that working solely on fodder cultivation was not enough to make villages self-sufficient. There was a pressing need to work on other issues related to livestock, such as fodder preservation, better feeding practices, breed improvement, value addition and marketing of livestock products, etc.

Experiences gained through this 'project planning' phase led to the development of **Himmothan's** "Integrated Fodder Livestock Development Programme," which commenced operations in March 2008, with the support of the Trust. It promotes rural livelihoods, and enhances incomes of about 44,000 people across 8,000 households from 80 villages in 15 project areas, spread over seven hill districts of Uttarakhand, through an environmentally sustainable, integrated livestock management programme.