

## Buck Wheat: A potential crop under rainfed and degraded conditions

According to the agricultural experts of the country sustainable livelihood in hills could be achieved by focusing on the improvement of quality of household livelihood by harnessing local resources, which are compatible with the mountainous agro-climatic situation. In general, adaptation in rainfed agriculture may be brought about by introduction of improved climate resilient crop cultivars, by modifying existing cropping pattern, diversifying the crops, introducing suitable water supply, irrigation, and drainage systems and resource conservation technologies.

*Jhuming* is a dominant cultivation system in the hills of North Eastern region but relatively a faulty system of land use. This is a major cause of soil erosion leading to degradation of soil resources in a faster rate. The normal *jhum* cycle has got reduced to 3-4 years, now-a-days, compared to 10-12 years previously under the influence of increased population pressure leading to more and more exploitation of land and forest resources. Besides, the increased variability of rainfall associated with increase in high intensity rainfall is posing serious threat to natural resources as well as sustainable livelihood of the people of the region.

Under such circumstances agricultural scientists deployed in this region are working hard to find alternative ways and means to sustain the livelihood of the poor farmers. Here, this particular crop, Buck Wheat, presents a very promising picture, though the crop was not very much acquainted to the farmers previously. Buckwheat can be grown on soils poor in nutrients, sandy soils and on stony fields. It needs little moisture for growth and development and tolerant to acidic soil conditions. It is a low input crop not sensitive to disease and pest and there is normally no need for application of insecticide, fungicide, herbicides and does not require any irrigation for the successful cultivation. The farmers of NEH region are basically small and marginal. Therefore, they can easily adopt the crop because of low input cost and get maximum benefit within a small period of time. In NEH region, about 1.38 million hectare areas are under shifting cultivation. As buckwheat requires less input, therefore abandoned areas due of shifting cultivation can be utilized effectively to grow the crop in large scale in this region. The prevailing agro-ecological condition of this region is suitable to producing buckwheat and therefore the crop is a potential crop for the farmers of this region therefore, buckwheat is a promising crop for NEH region of India.

Research carried out in Water Management Section of ICAR RC for NEH Region has revealed that October and November are the best period for growing Buck Wheat, which matures within 75 days after sowing. The crop produces average 10 quintal of economic yield if sown in this period. The present market price of 1 kg buck wheat grain is about Rs. 40/-. Hence, it is expected to fetch a substantial amount of additional income to the poor farmers, if buck wheat is adopted for cultivation at least in their degraded lands where cultivation of no other crop is possible. In remaining period of the year buck wheat produces a huge amount of plant biomass and that can be a good source of fodder for livestock during lean periods. Besides, immense flowering of the buck wheat attracts honey bees and rearing of honey bee in the buck wheat field offer another great opportunity for garnering additional income to the kitty of farmers of the region.



Buckwheat (Cv. *Gossigaon local*) cultivation at ICAR Research Complex for NEH Region

Source: Water Management Division, ICAR RC NEH Region, Umiam, Meghalaya