

# Conserving Insect Pollinator Diversity for Sustainable Rural Development

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**Abstract**—Most plants use insects to move their pollen from male to female parts of the flower. Insect pollination primarily by bees is an essential step in the production of many crops. Bees are the major group of insects involved in pollination, honey bees in particular. Four species of honey bees are found in India and the major amount of honey comes from the wild honey bee, *Apis dorsata*. India has the potential to provide self employment to over six million rural and tribal families through apiculture but only ten per cent of the existing potential has been utilised so far. Besides, honey there is a vast potential and scope for production and marketing of other bee products. Renting out bee colonies for pollination can be other source of income to the beekeepers. Fabrication and manufacturing activities like hive and bee equipments have remained unexplored and offer tremendous scope. All these would help generate employment for sustainable rural development. The decline in pollinator population and diversity presents a serious threat to agricultural production and conservation and maintenance of biodiversity. There is a need for conservation of pollinators by providing nesting sites and good forage and protecting them from pesticides. Surveillance of bee diseases, pests and predators in various eco-geographical zones is also important. Capacity building and awareness training programmes should be organised to promote apiculture in rural people. Considering the increasing global need of insect pollination and decline in pollination community, non-*Apis* bees also hold immense importance. There is an urgent need to generate a baseline source of overall information regarding them. Management protocols need to be increased so as to use the wild pollinator species as alternatives to honey bees. Besides there is need to develop biotechnological interventions which can contribute to the improvement of both honey bee and honey products.