Summary and conclusions
Presently we are everywhere listening the words sustainability and management. These are two important aspects of conservation. Any society can utilize biological resources but if this utilization is properly managed and also if it is sustainable there is no need of artificial conservation of that resource. Keeping this view in mind present work is carried out on wild cucurbits as whole from Bijapur district as a study unit. It was aimed at studying the levels of dependence rather utilization of wild cucurbits from local communities.

Traditional knowledge and activities are important sources of income. Traditional technologies and innovations that are adapted to local needs can provide a viable environment and sustainable path for economic development. Therefore for screening the potentialities of wild cucurbits in the socioeconomic and ecology of Bijapur district the work is carried out on different lines.

Primarily ecological survey is undertaken from cucurbit biodiversity point of view and results are depicted in the chapter ‘Ecodiversity of wild cucurbits’. Looking towards spatial variation another approach is touched namely ‘Microenvironmental studies’. This aspect denotes variation in environmental conditions of different cucurbit species. From socioeconomic point of view most useful species rather most used species in Bijapur district is *Cucumis trigonus*. The species is subjected for its ‘Biochemical status’. To know the levels of dependency and
relationship of the rural societies with wild cucurbits ‘Socioeconomic dimensions’ are developed through sociobiological survey.

On the basis of the present work following conclusions can be drawn.

- Present work is restricted mainly to the herbaceous flora in which number wise contribution of wild cucurbit is considerable.
- Ten different wild cucurbit species are recorded from Bijapur district. Tehsil wise there is no significant difference in the number of cucurbit species. The numbers are not affected by the heterogeneity or homogeneity of vegetation.
- *Citrullus colocynthis* has restricted distribution in the western part of the district. While *Cucumis prophetarum* is restricted to eastern part and middle zone of Bijapur district. *Kedrostis foetidissima* is commonly growing in eastern tahsils. *Momordica cymbalaria* is common weed in some part of Bijapur district.
- *Citrullus colocynthis* cannot share habitable sites with other cucurbits showing its uniqueness.
- *Diplocyclos palmatus* shows highest density while *Lagenaria* is least dense species.
- *Cucumis trigonus, Cucumis prophetarum, Diplocyclos palmatus, Kedrostis foetidissima* and *Citrullus colocynthis* are not so far mentioned to be occurring in Bijapur in the flora of Karnataka. The species *Ctenolepsis garcinii* is absent in Bijapur district.
• *Cucumis trigonus* carries significant morphometric and genetic variations.

• There is very small difference in the fruits of *Kedrostis foetidissima* and *Corallocarpus epigaeus*.

• *Cucumis prophetarum* shows higher phytomass among the studied species.

• Seed germination is also variable, mostly influenced by indigenous cucurbitacins as well as impermeable seed coat. This particular aspect require in depth work.

• Phonologically there is difference in individual species. Some cucurbits are tuberous, some are with swollen root system and third group is characterized by normal root system having annual nature.

• Cucurbits are growing on the soils having difference in grain composition. *Citrullus colocynthis* and *Cucumis prophetarum* is growing on gravely soil.

• C: N ratio of soil is narrow indicating soil contamination by nitrogenous fertilizers.

• The soils are sulphate and calcium rich, soil pH is mostly alkaline, amount of phosphorous is considerable. Possible clay minerals are Na2O, K2O, CaO, MgO, SiO2, MnO, and P2O5.
• Survey on comparison of cultivated and uncultivated soils denotes that cucurbits can be brought in to cultivation on cultivated areas. Even uncultivated soils can be brought under large scale cultivation of wild cucurbits.

• Biochemical analysis revealed that GC-MS is also a suitable technique for detection of cucurbitacins. *Cucumis trigonus* is first time reported to have cucurbitacins B and D.

• Survey revealed that, there is essentiality of education regarding natural resources including cucurbits to the school children. Involvement of women in the management of wild cucurbit produce is unique and some schemes can be undertaken for this group of society

• All the wild cucurbits of Bijapur district are known by rural inhabitants; moreover each of the species carries its own vernacular name.

• 6,88,663 hectors dry lands of Bijapur district either as wild or as semi cultivated can be utilized for cultivation of some potential wild cucurbits.

In nutshell it can be stated that present work is kind of bioprospecting of wild cucurbits of Bijapur district. However there are some gaps, which should be filled for proper exploration of them.