

## Socio-Economic Importance of Cucurbitaceous Vegetables in Hot Arid Zones of India

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### Introduction

The hot arid zones in India are spread over nearly 31.7 million hectare area of which 41.5 per cent is arable and 19 per cent is cultural wasteland. These zones are perpetuated mainly in North–West and Southern part of the country. The major parts of the country under hot arid climatic conditions are Western Rajasthan (19.62 Million ha), North-western Gujarat (6.2 M. ha), South-western Punjab (1.45 M. ha), South-western Haryana (1.28 M. ha), Andhra Pradesh (2.16 M. ha), Karnataka (0.86 M. ha), and Maharashtra (0.13 M. ha). These areas/ zones are characterized by hostile agro-climate and fragile eco-system, an annual rainfall between 100 – 500 mm with a coefficient of variation (CV) varying from 40 – 70 per cent, low and erratic rainfall combined with extremes of temperature (450-500 cal/cm<sup>2</sup>/day); low relative humidity; high potential evapo-transpiration value ranging from 1600 mm in eastern part and 1800 mm in western part of the hot arid zones. Other important characteristics of the hot arid regions are hot winds with high velocity, poor soil condition, poor ground water with brackish and saline in reaction, poor vegetation, frequent occurrence of drought and frost, difficult to execute agro-techniques, difficulty in post harvest handling and marketing owing to limited and inefficient transportation and marketing facilities, etc (Yadav and Soni, 2008).

Despite the various bio-physical constraints, there is very good scope of growing the cucurbitaceous vegetables like *mateera*, snapmelon, *kachri*, round melon, bottle gourds, to a considerable extent. The farmers/dwellers grow the above vegetables at large scale for their own use and sale the surplus for earning money and livelihood security. These vegetables are used not only as fresh in