

# in Belagavi, Karnataka

## Introduction

Sweet potato is one of the most important tuber crops in terms of production, economic values, contribution to calories and protein. Apart from this, it is the important staple food for many developing nations. In India, the production of sweet potato is 1.5 million tons from the area of 0.10 million ha (FAO, 2016). It is cultivated mainly for human diet and also used for animal feed and industries to a limited extent. In India, sweet potato is cultivated during Kharif and Rabi seasons. Under rain-fed conditions, the vines are planted in June-July (Kharif), whereas under irrigated conditions, it is planted during October- November (Rabi) in uplands and during January - February as summer crop (Zaid) in lowlands. Sweet potato, which takes 3 to 4 months

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Plate 1: Method of Sweet potato cultivation



Fig 1: Year wise area, production and productivity of sweet potato in Karnataka

to attain maturity, can be grown under constrained conditions with limited land, labour and capital. As far as Karnataka is concerned, sweet potato is cultivated in an area of 2,560 ha with an annual production of 36,000 tons under commercial production system (National Horticulture Board, 2017). In Karnataka, Belagavi district with maximum area accounts for more than 50 per cent of the state's production. Hence, it is considered as a major source of income for farming communities for their livelihood of the state

### **Cultivation of Sweet Potato**

Sweet potato is cultivated in Belagavi district of Karnataka during Kharif season as rainfed crop, wherein most of the farmers in the study area were used local variety for vine multiplication. To begin with, they grew vines in a primary nursery from which it is transferred to a secondary nursery before transplanting in to main land for large scale cultivation. Apart from weeding, farmers have used pesticides for cultivation whereas Farm Yard Manure (FYM), and Molasses were used as a chief source of nutrients.

# Area, Production, and Productivity of Sweet Potato in Karnataka

In Karnataka, sweet potato was cultivated commercially in 2,540 ha with an annual production of 36,000 tonnes during 2016-17. Both area and production of sweet potato in Karnataka has not fluctuated over the years (Fig 1), except 2004-05 which might be due to ample

precipitation and good weather conditions for a bumper harvest. On the other hand, the productivity of sweet potato has increased from 7.5 tons/ ha in 2001-02 to 14.2 tons/ha in 2016-17. Fig 1: Year wise area, production and productivity of sweet potato in Karnataka

Among the 30 districts in Karnataka, Belgaum district holds the maximum area under sweet potato cultivation producing more than 50 per cent of its production. About 95 per cent area under sweet potato cultivation in Karnataka was confined mainly to two taluks namely, Belagavi and Khanapur. In Belgaum, sweet potato is cultivated in 1,084 ha with an annual production of 13,000 tons (Fig 2).

Fig 2: Sweet potato area in



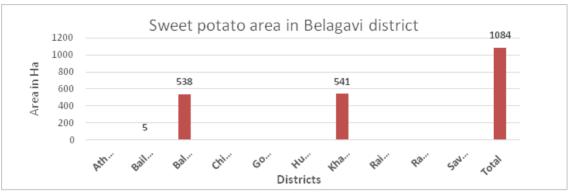


Fig 2: Sweet potato area in Belagavi district of Karnataka during 2016



Fig 3: Year wise arrival and price of sweet potato at APMC, Belagavi, Karnataka

Belagavi district of Karnataka during 2016

## **Marketing of Sweet Potato**

The sweet potato tubers are sold in the Agricultural Produce Marketing Committee (APMC) located in Belgaum, where commission agents /traders play an important role in channelizing the produces between buyers and sellers. In APMCs, tubers were auctioned in a transparent manner to traders from various parts of the country which were transported to wholesale markets located in different cities for retailing. Market price of sweet potato has showing increasing pace from Rs.250 / quintal in 2000-01 to Rs.700/ quintal in 2016-17 (Fig 3) over the period of time, even though the arrival of sweet potato to

APMC market has been declining which depicts the raising demand for sweet potato by the buyers all parts of the country. Nutritional value of sweet potato

Sweet potato is a rich source of calories, vitamins and minerals, etc. and its important component in the diet of rural population. The colour of sweet potato tubers varies including white and red. Since these varieties are grouped together as white-fleshed sweet potatoes. These varieties do not have the vitamin A (beta-carotene). Orange-flashed sweet potato (OFSP) is an excellent and cheap source of beta-carotene, which rectifies vitamin-A deficiency among children and pregnant women (Plate 3). Unlikely, lack of awareness about OFSP varieties and inadequate knowledge about its nutritional aspects among producers and consumers has reduced their access towards the particular crop. In the era of drastic climate change and water scarcity, sweet potatoes, which require very less water for its growth would be a great boon for the rural population to overcome nutritional security in the near future.

# Marketing channel of sweet potato

Most of the farmers in the study area are followed marketing channel I rather than marketing channel II. The buyers come from adjacent places mainly wholesalers for buying sweet potato at APMC market







Plate 2: Sweet potato trading and transportation at APMC in Belgaum, Karnataka





Plate 3: Purple and orange-fleshed sweet potato

at Belagavi. Whereas, the marketing channel II involves sales of sweet potato in Karnataka itself which is consumed locally (Prakash et al, 2018-Accepted for publication). The existing marketing channels are provided below.

Channel - I

Producers → APMC market→ Wholesaler → Retailer → Consumer

Channel - II

Producers → APMC market → Retailer → Consumer

## Conclusions and policy implication

Sweet potato in Karnataka is grown mainly for commercial purpose rather than self-consumption. Though area under sweet potato cultivation has not witnessed any improvement, but improvement in productivity has helped to uplift pro-

duction over the years. Further, intensified awareness for its nutritional benefits among the consumers led to increase in demand over the years which ultimately improved farm income as it enforced by upward price movement. To further enhance the production and income, awareness about improved cultivation practices such as improved varieties, adoption of advanced package of practices, innovative technologies and exploration of alternative markets to fetch a competitive price would be pivotal.

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