

## Success Story of Baby Corn Cultivation in Haryana

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Baby corn is being cultivated round the year in Aterna village of Sonipat district in Haryana state of India. The village, Aterna is popularly known as baby corn village. Baby corn hybrid HM 4 is short maturing crop with an average yield of 6-8 q dehusked corn per acre. Three to four crops can be taken from same piece of land in a year. Farmers can earn net income of Rs.30000/- to Rs.40000/- in one season from one acre of land. Socio-economic condition of the villagers improved significantly. Every farm family of the village has owned pucca house, land, vehicles and other facilities.

**B**aby corn is a young finger like unfertilized cobs of maize with one to three centimeter emerged silk preferably harvested within 1-3 days of silk emergence depending upon the growing season (Fig. 1 & 2). It is nutritive and its nutritional quality is at par or even superior to some of the seasonal vegetables. Besides proteins, vitamins and iron, it is one of the richest sources of phosphorus.



Fig. 1. Baby corn with husk



Fig. 2. Baby corn without husk

Baby corn can be eaten raw and included in diets in number of ways as soup, salads, chutney, pakora, vegetables, pickles, kheer, Chinese preparations, etc. It was first discovered in the early 20<sup>th</sup> century by Korean botanist, Jason H. Ahn. Cultivation of this crop started in the early 1970s in Thailand. Gradually it pervaded in different countries. These days, its cultivation is gaining momentum in nearby areas of cities. Today many farmers in different parts of the country are taking up contract farming of baby corn on behalf of food

processing companies. The companies supply the farmers with high quality inputs including hybrid seeds besides cultivation know-how. The harvested crop is then bought from the farmers at a predetermined price. It is processed and supplied in different cities and exported to the overseas market.

Baby corn plays a significant role in ensuring livelihood security and augmenting income level of farmers in peri-urban areas. Maize hybrid HM 4 possesses all the desirable traits of an ideal baby corn. Its cultivation is gaining momentum not only in national capital region Delhi but also in peri-urban interface of other states in India. This single cross hybrid has an attractive creamish to light yellow colour with desirable size of 6.0 to 11.0 cm in length and 1.0 to 1.5 cm in diameter with regular row arrangement. It is highly nutritive and sweet in taste. It has most desirable medium height plant type. It is lodging resistant, prolific and responsive to high dose of fertilizers. Plant remains green even after picking of baby corn. In every plant, three to four pickings are common. Green plants also provide quality fodder to livestock. It is also suitable for intercropping with vegetables, pulses, flowers, etc. to get additional income from the same resources.

Farmers of “Aterna” village in Sonipat district of Haryana started baby corn cultivation during 1997. Initially farmers were using the seed of private sector hybrids costing Rs.160-200/-kg. Farmers had to invest heavily on seed input due to higher seed rate (20 kg/acre) and costly seed. In spite of this fact, farmers continued cultivation of baby corn due to commercial value and high income in short period. An innovative farmer Shri Kanwal Singh Chauhan of this village came to know about new baby corn hybrid HM 4 from the breeder of this hybrid, Dr. Sain Dass at Regional Research Station, Chaudhary Charan Singh Haryana Agriculture University, Uchani, Karnal. He obtained seed of HM- 4 and introduced this in his village for baby corn cultivation. He obtained seed at very cheap rate i.e. around Rs.50/- per kg. Seed rate of this hybrid is low (10 kg/acre). Therefore, cost of cultivation was reduced. Produce of baby corn was brought in Azadpur Mandi, Delhi. Its demand increased due to desirable colour, size and taste of this hybrid. He invested less than Rs.10,000/- per acre and earned more than Rs.30,000/- per acre within 60 days of crop duration. He started growing HM 4 round the year. Other farmers of the village also initiated baby corn cultivation and today Aterna is known as Baby Corn Village. Its cultivation in more than one thousand acres may be observed at any time in any season in Haryana. National Seed Corporation is producing seed of HM 4 and making seed available to the farmers. Farmers of this village are also producing truthful seed of HM 4 hybrid. They are fulfilling seed requirement of HM 4 of neighbouring villages as well as farmers of different parts of the country. Some farmers have also adopted private company varieties (Syngenta 5414 and Syngenta 5417) for baby corn cultivation. Realizing the scope of the baby corn, villagers organized and got registered a cooperative society known as “Aterna Baby Corn Production and Marketing Cooperative Society Limited” during 2009. Baby corn processing plant was also established in the village in 2008-09. Baby corn is canned in the

processing plant and supplied in distant markets with help of marketing/ exporting agencies. Villagers have option to sell their produce either in market or in processing plant.

Training programmes on seed production, cultivation and value addition of baby corn were organized by the Directorate of Maize Research, New Delhi in Aterna village and Pusa Campus, New Delhi for villagers. Farm women are keenly interested in recipes of baby corn. Trained farm women are preparing recipes viz. pickle, murbaba, pakora, soup, chutney, Manchurian, vegetables, kheer, burfy, laddoo, etc. in the village. Baby corn hybrid and its value added products were also displayed and sold in exhibitions organised in different parts of the country. Visitors were interested and expressed satisfaction over quality of HM 4 hybrid and its products.

Baby corn cultivation provided increased employment opportunities to the farmers because it can be taken round the year in any season. Intercropping in baby corn during the early growth stage helped the farmers to increase the land use efficiency. De-husking, weighing, grading and packaging of de-husked baby corn provided employment to the female members of a family. Even processing of baby corn and marketing in nearby areas helped in generating employment. The intercrops like seasonal vegetables, flower crops etc. also supplemented the farmer's income. As a result of increased income the possession of assets and saving of the farmers also increased. The other reason for increase in possession of assets was the increase in animal inventory due to availability of plenty of green fodder to the milch animals. Every farm family has own pucca house, land, vehicles and other facilities. Social impact has been also seen in terms of improvement in housing, increase in satisfaction and prestige. Overall socio-economic condition of the villagers has been improved. HM 4 proved to be boon for the farmers of Aterna village.

### **Conclusion**

Farmers can earn more profit in short span of time from cultivation of baby corn. Income can be further increased from intercropping of seasonal vegetables (e.g. pea, cauliflower, cabbage, radish, methi, dhania, etc) and flowers (marigold, gladiolus, etc.), etc. taken with baby corn cultivation. The produce can be sold to star hotels on regular basis. It can also be sold in Azadpur mandi, canning plant, SAFAL, Reliance companies, etc. Baby corn also provides quality fodder for livestock. Aterna is ideal village for baby corn cultivation. One can visit Aterna to witness the success of baby corn cultivation in the village.