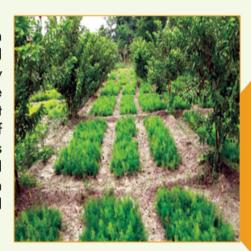




Mr. Santosh Kumar of village Sondho Basdeo, PS. Goraul, Dist. Vaishali, Bihar has established himself as a medicinal plants entrepreneur after a long struggle from his location. His father Dr. Anand Kishor Pandey is a medical practitioner at the same time he is a successful farmer. He was inspired for cultivation of medicinal and aromatic plants by Dr. Kanhaiya Prasad, an agriculture expert at Agricultural University, Pusa, Samastipur, Bihar in the year 2011, where he went for collection of quality seed of Papaya and got advice to contact with CIMAP, Lucknow. to get further information. Mr. Santosh Kumar went to CIMAP, Lucknow and got some information from a scientist about demand and cultivation of Shatavar (Asparagus racemosus), Akarkara (Anacyclus pyrethrum), Kalmegh (Andrographis paniculata), Sarpagandha (Rauvolfia serpentina), Aloe vera, Safed mushli (Chlorophytum arundinaceum), Tulsi (Ocimum tenuiflorum) and other important medicinal and aromatic plants.

He collected mobile number of the 25-30 farmers of Uttar Pradesh and Uttarakhand, met the farmers and visited the cultivation area and learnt the practical cultivation technique, harvesting, primary processing and marketing of the harvested material staying in the farmer's house and some times in the farm houses of the farmers at Barabanki, Bareilly, Rampur, Chandouli, Pantnagar for a period of about 6 months. At this time he has selected the medicinal species according to soil & climate of his location of Bihar, and collected 12000 seedlings of Shatavar (Asparagus racemosus) for cultivation in 1 Acre land, quality seed of Akarkara (Anacyclus pyrethrum) and Kalmegh (Andrographis paniculata) for 1 Acre each crop.





He started cultivation of Shatavar (Asparagus racemosus) in his field in September 2011 and after 18-19 months in 2013 he got a more or less expected yield of tuber roots, sold to local market and earned profit of Rs.2,20,000. Realizing the market demand, rate of profit as he earned and with the knowledge of agro-technique, harvesting and primary processing etc. learnt, he decided to go on cultivation of medicinal plants and at the same time involve the neighboring farmers who are involved in cultivation of cash crop 'Tobacco' from a long time back and their income is decreasing rapidly year after year due to various reasons.

He asked for help from the District Horticulturist, SMPB but failed. Then he has established his 'Green India Nursery' and started propaganda highlighting the different benefits, organized the interested farmers - initially very few and gradually joining of farmers in the group, given them the training for cultivation, harvesting, processing and marketing of medicinal plants crop free of cost and arranged for supply of quality seeds /QPM and purchased the entire production from them on reasonable price which he sold in the local market of Bihar and also in Lucknow, Delhi market. In the year 2015 he experienced a huge loss of Rs. 10 lacs of himself and about Rs. 22 lacs of associate farmers, still then he and his team did not look behind, continued the process of works and developing day by day.

In the year 2019, he met Prof. (Dr.) Asis Mazumdar, Nodal Coordinatior, Dr. Sanjay Bala, Regional Director of Regional-cum-Facilitation Centre, Eastern region who have organized several workshop, seminar for promotion, implementation of national schemes and overall development of medicinal plants in Bihar. He is always in contact with the RCFC-ER. He has undergone one week residential training for raising QPM of medicinal plants at Jadavpur University Campus during February 2020. He has been provided support from RCFC-ER for production of QPM through his Green India Nursery which has been distributed to 10 Nos. of farmers in order to involve them in cultivation of medicinal plants during last year 2020.









During the year 2021, he has the credit of cultivating of commercial Shatavar (Asparagus racemosus) 70 Acre, Akarkara (Anacyclus pyrethrum) 120Acre, Kalmegh (Andrographis paniculata) 05 Acre and other crop Sarpagandha (Rauvolfia serpentina), Kala haldi (Curcuma caesia), Ashwagandha (Withania somnifera), Lemon grass (Cymbopogon flexuosus) etc. over 17 Acre by himself and associate farmers in and around Vaishali and adjoining districts in Bihar and developing his associates farmers group in cultivation of medicinal and aromatic plants day by day.

At present, there are 300 associate farmers in his group, cultivating medicinal plants at Vaishali and adjoining districts and earning good. They are harvesting of Shatavar (Asparagus racemosus) tubers after 18-24 months of planting in hot sunny days with temperature $35^{\circ}\text{C}-42^{\circ}\text{C}$ to obtain tuber colour yellowish which fetch higher market rate. After harvesting the tubers are cleaned and boiled in water. The boiled tubers are peeled manually by pulling the outer covering and well dried in hot sun for 4-6 days following further drying under shade in well ventilated place. Then the dried tubers are packed as per market demand and dispatched. He is trying to procure boiler and drier which will release the farmers from dependency on weather condition. Presently harvesting and processing is executed in hot sunny days having temperature of $35^{\circ}\text{C}-42^{\circ}\text{C}$, otherwise not.

In the year 2020, he has been honored and awarded by the central honourable minister Mr. Giriraj Sing in a ceremony organized by the ICAR, Patna, Bihar.

Cultivation and marketing details of medicinal plants by Mr. Santosh Kumar along with associate farmers

Year of	Area		ea Harvesting		Rate	Sale	Expenditur	Not week
cultivati	Name of the species	cultivated	Materials obtained	Quantity		amount	e (Rs.)	Net profit (in Rs.)
on	Cl	(Acre)				(Rs.)		
2013	Shatavar (<i>Asparagus</i> <i>racemosus</i>) Nepali Variety	1	Dry Tubers	18 quint.	17500	350000	160000	155000
	Mentha (Mentha piperita)	5	Oil	150 Lit.	1500	225000	150000	75000
2014	Shatavar (Nepali Variety)	4	Dry Tubers	78 quint.	19000	1422000	724000	698000
	Mentha (<i>Mentha piperita</i>)	9	Oil	260 Lit.	1600	404000	292000	112000
2015	Shatavar (Nepali Variety)	15	Dry Tubers	125 quint.	16000	2000000	2180000	-180000
	Shatavar (Nepali Variety)	20	Dry Tubers	0	0	0	2100000	-2100000
	Mentha (<i>Mentha piperita</i>)	14	Oil	190 Lit.	1500	285000	400000	-115000
	Mentha (<i>Mentha piperita</i>)	26	Oil	0	0	0	520000	-520000
2016	Shatavar (Nepali Variety)	13	Dry Tubers	292 quint.	19500	5694000	2373000	3321000
	Akarkara (Anacyclus pyrethrum)	13	Tuber root	45 quint.	15000	690000	544000	146000
2017	Shatavar (Nepali Variety)	28	Dry Tubers	601 quint.	25000	15025000	5210000	9815000
	Akarkara	35	Dry root	180 quint.	17000	3060000	1560000	1500000
2018	Shatavar (Nepali Variety)	38	Dry Tubers	770 quint.	35000	26950000	7900000	19050000
	Akarkara	45	Dry root	242 quint.	20000	4840000	2015000	2825000
2019	Shatavar (Nepali Variety)	39	Dry Tubers	871 quint.	30000	26130000	8200000	17930000
	Akarkara	62	Dry root	315 quint.	22000	6930000	2440000	4490000
2020	Shatavar (Nepali Variety)	45	Dry Tubers	1025 quint.	14000	14350000	9050000	5300000
	Akarkara	45	Dry root	577 quint.	35000	20195000	14770000	5425000

For more information please contact:

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