

# Chickpea: Synopsis of a Value Chain Study

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*Chickpea cultivation, which has huge potential in India, is as yet underutilized and undervalued. Planned interventions will go a long way in motivating the small landowners to cultivate chickpea, both as a viable crop and for its nutritive value.*

Chickpea is one of the most commonly used pulse crops in India. In fact, a cursory look at the statistics tells us that India produces two-thirds of the world's total chickpea production and yet it imports a third of the gross imports, underlining how important a crop it is for us. For the last eight months, since September 2009, I was part of Pradan's thematic team for a value chain study on chickpea. The study demanded that I interact with various stakeholders, such as traders, agents, retailers, apart from the farmers.

Although chickpea is also called Bengal gram, it is not grown in Bengal. For me, who didn't even know how to differentiate between *kabuli* chana and *desi* chana, this was quite a revelation. *Kabuli* chana is the irrigated variety of chickpea whereas *desi* chana is the more resistant and indigenous variety. I did not even know that such a distinction existed! In any case, I motivated myself by saying that it is always best to start right at the bottom, as far as awareness about chickpea is concerned, because that would mean that the only way to go was up!

My visits took me to many places—Mandla (MP), Chitrakoot (UP), Vidisha (MP), Chhattisgarh, Pakur (Jharkhand), Betul (MP) and Bikaner (Rajasthan), to name a few. These visits were an eye-opener for me because after having spent four to five years working in the rural hinterlands with tribals, the nitty-gritties of chickpea cultivation and sale took me by complete surprise. I was also surprised by the unutilized potential of this crop to address poverty and malnutrition.

The farmers of different regions cultivated the crop for different reasons. A tribal farmer in Mandla or in Dindori cultivated it for self-consumption first and then, maybe, for commercial sale. A farmer in Vidisha or the Malwa region knows that chickpea is one of the more sturdy crops for farmers with lands that have erratic irrigation and poor soil quality. This is why most farmers here undertake to cultivate the crop. On the other hand, in water-scant Rajasthan, especially Bikaner, the farmer cultivates chickpea only if there are normal rains. Farmers in UP, especially Chitrakoot, are happy to cultivate chickpea because it hardly needs any aftercare and, therefore, suits the smallholder farmer, who looks for wage labour during the same time.

The situation is complicated by the *kabuli* variety of chickpea. Many of the support organizations, particularly NGOs, that hosted us during the course of the study, were promoting *kabuli* chickpea as part of their partnership programme with Oxfam. *Kabuli* is an irrigated variety of chickpea, which can be grown in residue moisture only in black soils that have better moisture retention capabilities. But an assessment of the historically disadvantaged marginal and smallholder families reveals that *kabuli* is not suited to their needs because neither do such segments of growers enjoy access to irrigation nor do they own the more fertile and precious black soils. Even those who enjoyed irrigation facilities would prefer a crop that would add to their household food security rather than cultivate chickpea, which has limited relevance in this respect. Also, with the NREGA promising 100 days of wage labour for every household, the more labour-intensive *kabuli* variety has become less of a priority compared to the *desi* varieties. The introduction of varieties that are suited to local contexts has been a primary learning of the study.

Chickpea, in most places, is being cultivated using age-old practices and, therefore, has been continuously yielding diminishing returns. Farmers continue cultivating it because of the labour available in their own households and also for want of better Rabi cropping options in un-irrigated areas. Seeds are recycled and there is hardly any seed treatment. Although there are various varieties, which have been introduced from time to time, the knowledge about the varieties and micro-practices in chickpea cultivation is very limited. Overall, chickpea is a crop that is most suited to the un-irrigated lands of farmers living mostly in the semi-arid regions of MP, Rajasthan, Maharashtra and

AP. The cultivation of the *kabuli* variety can actually make an impact in remote areas where there is irrigation and where there are black soils. This is primarily because regions with irrigation nearer to markets would opt for vegetables and other more remunerative options.

The national average is 790 kg per hectare (FAO) whereas countries such as Myanmar have an average yield of 1,100 to 1,200 kg per hectare; our domestic production has been hovering between the 5.5 million MT and 6 million MT mark. Things stand in stark contrast when we consider the potential of chickpea both in irrigated and un-irrigated areas (The average potential productivity estimated by the farmers and experts for irrigated chickpea is 20 Q and for un-irrigated chickpea is 12 Q). The demand for chickpea has been hovering between 6.5 and 7 million MT mark. A growth rate of almost 2% in the chick pea demand may be assumed, primarily due to the growing population and also the fact that it is priced relatively lower than the other pulses. This deficit in supply is met by imports from countries such as Tanzania, Myanmar, Australia and Spain.

The *kabuli* chickpea does pose some exciting prospects in the chickpea sector but, for the masses, *desi* will always be the option for daily use. Therefore, although there may be some rise in the demand for *kabuli*, it will never be able to gain substantially on the demand for *desi*. Despite these developments, the primary producers are not in a position to benefit from the enhanced demand dynamics because the productivity of chickpea is very low and erratic, owing to various reasons (lack of technology penetration, lack of seed research, long supply chains, etc.) The nil import duties for pulses also mean that

countries with higher levels of productivity and lesser costs of productions such as Myanmar and Australia will have cheaper farm gate prices and, therefore, will prove to be a better option than the home-grown desi chickpea.

Up the value chain, almost all the actors (millers, besan mills, etc.) are trying to diversify their businesses by trading in other items such as ginger and coriander. That there is indeed excess milling capacity in the country is evident from the fact that almost every mill utilized not more than 50 to 100 days for milling chickpeas.

The government's apparent view that pulses is only 'a poor man's food' and not a 'poor man's crop' is perhaps driving the policies around pulses. Even the small NGOs, involved at the grass roots level in popularizing chana, particularly the *kabuli* variety, are doing so with a myopic view, and without weighing the threats and the opportunities simultaneously. Only in Sironj has a scientific Package of Practices (PoP) and marketing services extended to its producers;

the rest of India's smallholders are at the mercy of the *adhatis*, the traders and a very erratic price system. *Adhatis* is the local word for middlemen in Rajasthan; they are basically brokers who aggregate agri-produce in the village or at the entry point in the mandi and then sell it. They are typically those intermediaries that make the chickpea supply chain an unusually long one, and add little value in the process. With the rising population and a very low productivity in the pulse sector, there is always a demand-supply mismatch and, therefore, our dependence on the international market for imports to meet our demands.

At the end of the study, I have mixed feelings. I am able to talk about the subsector with a greater degree of confidence. However, I am disappointed to see how little the small and marginal farmers have benefited from this crop. Intervention in this sector is largely simplistic. Moving past naiveté, it is high time, we gained a better understanding of this crop and gave its value chain its due. This is necessary for any intervention to be successful.