
The cauliflower dilemma!

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Abstract: The present case shows the plight of small farmers during demonetisation drive in India. This unprecedented move by the Government of India has led the entire economy in a state of sudden shock and small farmers found themselves, very much helpless and confused. The case visits the production cycle of cauliflower from the perspective of a small farmer and traverses the complete journey of money borrowing for different phases of agricultural production. Options available to the farmers have been described with a comparative perspective. Both the formal and informal aspects of agricultural business have been presented in a typical Indian scenario with relevant stakeholders. The case presents a very practical perspective of small farmers in India, hence ideal for understanding this most significant activity of Indian activity.

Keywords: demonetisation; vegetable production; agricultural loan; Pradhan Mantri Jan DhanYojna.

Reference to this paper should be made as follows: Gupta, G., Kumar, V., Paruthi, M. and Mendiratta, P. (2019) 'The cauliflower dilemma!', *Int. J. Indian Culture and Business Management*, Vol. 18, No. 3, pp.291–297.

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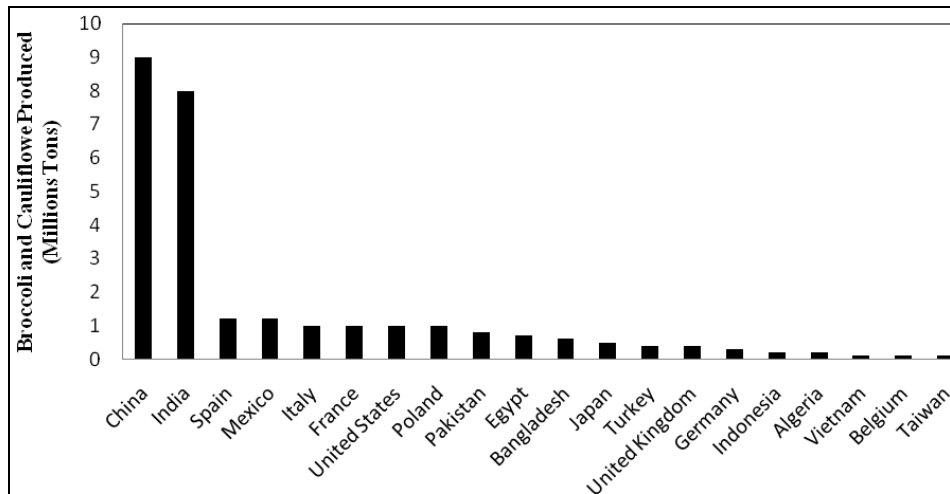
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1 Introduction

All was going well for Ramesh, a small farmer in the village of Hoshiarpur in Punjab. He was engaged in the production of cauliflower for years now. Punjab, being the food-basket of India, is engaged in the production of a variety of vegetables – brinjal, cabbage, tomato, cauliflower, onion, peas and many more. Cauliflower is one of the most daily consumed of commercial crops in India. India follows China in the production of cauliflowers and broccoli worldwide, if we see the production of broccoli and cauliflower worldwide from Figure 1 (World Atlas, 2017).

Figure 1 Production of broccoli and cauliflower worldwide



In the month of May, Ramesh wanted to sow cauliflower seeds to meet the deadline for early season harvesting. However, being a small farmer with just one hectare of land, Ramesh did not have sufficient funds with him. So, he started to make a rough calculation on the fund requirement and started looking for a loan in June. The cauliflower production expenditure (per hectare) identified by Ramesh has been shown in Table 1.

Therefore, production of cauliflower would cost Ramesh approximately rupees 65,000 with a possible margin of 10% (depending upon the weather conditions). Field Preparation for cauliflower requires deep ploughing, three to four times cross-harrowing and planking to make the soil surface even. On an average, 750 grams seeds are required per hectare. Cauliflower production requires higher content of phosphate and nitrogen content in soil. In addition to this, a rich supply of fertilisers is also needed. During the various stages of production, Ramesh would require daily wage workers to help him in the production. He did not have much help from his family, which consisted of his wife, a sister and three school going children.

Table 1 Cauliflower production expenditure (per hectare)

<i>Field preparation (week 1)</i>	<i>Seeds (week 2)</i>	<i>Weeding/ pesticides (week 3–6)</i>	<i>Drip irrigation (week 1–9)</i>	<i>Fertilisers (week 1 and 4)</i>	<i>Wages (week 1–week 14)</i>	<i>Transport (week 13–14)</i>
Rs. 6,500	Rs. 1,350	Rs. 9,000	Rs. 11,545	Rs. 9,000	Rs. 10,500	Rs. 18,944

Ramesh's village is sparsely connected to the facilities in the area. Even though he had opened a bank account under the recent Pradhan Mantri Jan DhanYojna for which an enrolment camp was set up close to his house and the agents of the bank visited the nearby houses to educate the people about the advantages of the scheme. The bank to which Ramesh could approach for loan is however located very far away from his village. Since the sowing season was approaching nearer, he wanted funds within a short period of time. As per his cost estimates, he decided to take a loan of rupees 65,000. But, the procedure for availing a loan from a formalised bank was too long lengthy and cumbersome process for him. It also required a guarantee in terms of pledging of land. Instead of this, taking loan from a local money lender 'Sohan' appeared to be a more convenient option for him though at a higher interest rate of 24% per annum. Such money lenders, works in a very informal way and are preferred by many farmers (Srinivas, 2015). Considering the high interest rate and his immediate requirement, Ramesh took a loan of rupees 35,000 from him and went ahead with his sowing plans in first week of August.

In the month of September, he took another loan of rupees 30,000 from Shyam, (another commission agent), at an annual interest rate of 18%. Due to past business relations with Shyam, Ramesh was able to obtain funds at a lower interest rate.

After getting the remaining loan amount and completing the back-breaking work on his field, it was finally the time for harvesting the cauliflower. It was first week of November. He was ecstatic to see the overwhelming produce this season because in the last two years, there had been a dry spell. The rains were not sufficient all over the Indian subcontinent to produce a good harvest. The cauliflower cultivation is sensitive to water shortages as it is a shallow rooted crop. But according to him, things were going to change for good. His cauliflower production was 230 quintals (approximately 11.26 tons) this year.

By November, Ramesh harvested his crop and was ready to sell his crop in the market. Due to his limited knowledge and awareness, Ramesh hired Shyam to take his produce yield to Azadpur Fruit and Vegetable Market in New Delhi, which is a sprawling wholesale market and boasts of being Asia's largest. It officially houses 2,200 agents and caters to almost whole of the North India with over 40 lakh metric tons of fruits and vegetables (World Atlas, 2017). On an average, 14,000 tons of yield arrives daily in the market which led to an annual turnover of Rs. 9,000 crores (Smart Indian Agriculture, 2016). Shyam was responsible to cart the freshly harvested cauliflower on behalf of all the farmers in Ramesh's village to the mandi for sale.

2 Role of Arthiyas

Commission agents, like Shyam, popularly known as Arthiyas in India, act as mediators between the farmers and the agencies which buy the agricultural harvest (Singh, 2016, 2014). Farmers have financial needs. They require funds to plough the fields, make the land arable, buy seeds from the market, sow the seeds, buy fertilisers and pesticides to tend to the crops and then finally harvest the produce. Since the small farmers usually have no collaterals as well as assured income streams, they fail to procure credit from the formalised institutions, so, they have to take the other route. Here is when the commission agents come into the picture. They lend the required money to these small farmers, but on a higher interest rate as compared to the formal institutions. Then, after the crop is harvested and ready to be sold into the market, the commission agents act as the key players between the farmers and buyers for facilitating the auction. For undertaking this activity, they charge some commission from the farmers, which is normally a percentage of the value of the yield sold. On the other side, the agents also provide facilities like loading/unloading, cleaning, packaging and delivery of the harvest to the buyers. After going through this tedious process, Ramesh was eagerly waiting, for getting the fruits of his hard work.

3 The demonetisation

The early morning of 9th of November 2016, Ramesh was walking down to his farm, feeling the warmth of expected money from the yield. He saw a group of grim-faced farmers, discussing something very serious. Intuitively, he stopped to have an idea of the happenings. What he came to know was shocking news for him. Last night, Government of India, banned the currency notes of rupees 500 and 1,000 denominations. Curious about the demonetisation, he enquired from his fellow friends. It was hard to digest that demonetisation involves the scraping of old notes and coins and replacing it with new notes and coins (The Economic Times, 2016). It may sometimes also happen that instead of replacing the old with new, a completely new currency gets into circulation. Central Bank of the particular country disregards the scrapped currency as the official mode of payment for future transactions. Farmers revealed to Ramesh that on the night of 8th November 2016, Prime Minister of India, while addressing the nation at 8 PM, announced that rupees 500 and rupees 1,000 notes will not be a legal tender anymore, effective from the midnight. This burning news has left the people from all sections of the economy in a sudden shock.

Ramesh was also shocked as he had never heard about this before. But to his surprise, his friends told him that demonetisation has happened earlier as well in India. There have been instances of the government choosing the road to demonetisation in the past years too. Prior to January 1946, when India was still under the British ordinance, rupees 1,000 and rupees 10,000 bank notes were in circulation. However, in January 1946, these higher denomination notes were discontinued to be the legal tender. Then after almost a decade, the bank notes for rupees 1,000, rupees 5,000 and rupees 10,000 were re-introduced in 1954 by the Congress Government headed by Pandit Jawaharlal Nehru and again discontinued in January 1978. Ramesh tried to figure out the impact of 1978 Demonetisation on common man like him. In 1978, demonetisation did not affect the common man because at that point of time, rupees 500 currency notes did not exist and using rupees 1,000 notes were beyond the capacity of common man (Governance Now, 2016). So, the general public was not affected and welcomed the move with open arms. Rupees 1,000 note made a comeback in November 2000. Rupees 500 currency note came into circulation in October 1987.

Prakash, whose younger brother is working in Delhi as a daily wage labourer, had a better knowledge about demonetisation. Prakash further added that the present scenario is very different from the one prevailing in the year 1978. Carrying rupees 500 and rupees 1,000 notes is very much common with people nowadays. This includes the people employed as daily wage labourers to the richest of the society. These two denomination of the notes accounted for 86% of the total money in circulation in India, which is rupees 15.4 lakh crore in absolute terms.

On the night of 8th November, it was flashed on all news channel screens that this move by the Indian Government will burn the black money in the system and hit those, funding the terrorist activities. Black money remains as undisclosed income to the government for circumventing taxes and hence the government suffers losses. The action was undertaken to target these tax evaders and put a stop to India's 'shadow economy'. It was believed that this crackdown will expose the hidden and unaccounted wealth of the people to the nation (Live Mint, 2016). Another hidden objective behind this move is to nurture a cash-less economy and promote the electronic transactions (Mittal and Kumar, 2018). Sometime back nobody could have imagined buying milk from Mother Dairy outlets using e-wallets or your grocery vendor accepting payment through a Paytm card! However, this seems a much calculated move, in hindsight. Going cash less will also help cut the roots of corruption as cash is anonymous and higher denomination notes facilitate the ease of transaction. Therefore, going cash less seems only fairer.

4 The selling dilemma

After discussing about what had happened, Ramesh and his friends waited for the cauliflower yield to reach mandi for sale. On the evening of 9th November, cauliflower reached the Azadpurmandi. The Arthiyas, (also known as wholesale traders), were ready to sell the cauliflowers to the sub-retailers who further sell the cauliflower produce to the local vendors of Delhi. Shyam was able to auction daily about one truck-load of cauliflowers. However, it looked like an impossible task on the morning of 10th of November (Business Standard, 2016). Shyam had been working in the mandi since 15 years now and he had never seen such a contraction in demand overnight.

The prices had hit a rock-bottom. Shyam was selling cauliflower at the rate of 10–12 rupees per Kg before, which suddenly declined to rupees 2–3 per Kg. The market charges 1% fee on the sales value from the farmers and the commission agents charge up to 6%. Shyam used to charge a small commission of 5% from Ramesh and his farmer friends due to old business relations and trust. When the news reached Ramesh, he was in a dilemma. He did not want his cauliflower to sell at throw-away prices because he will not be able to recover even his cost of production and pay back the loan. Also, he also could not store his cauliflowers in the hope of prices recovering a bit in future because it is a highly perishable crop. A fresh cauliflower on an average lasts for 7–21 days.

One option Shyam suggested Ramesh was that he can sell his cauliflowers in exchange of the old notes of rupees 500 and 1,000 (The Tribune, 2016). This would have saved Ramesh from selling his crop at such low prices because the buyers were short of the new currency but had the old currency notes in abundance. This could also help him to sell his produce at a price higher than the usual price also because nobody was ready to sell their produce in exchange of the old currency, whereas, the buyers wanted to get rid of the same. This could increase the demand of his cauliflowers by the buyers in the Mandi. However, there was a problem associated with this proposal. Ramesh would have to travel all the way to his bank branch, and stand in never-ending queues to get the old currency notes exchanged. It would have taken him more than a month to exchange all the old notes for new ones. But, not tending to his farm for a full month was a big problem as he had to prepare his farm for the next sowing season and he could not afford to lose so much time.

The other option he had was to take those notes to the money lender who had advanced the loan to him. He had offered to pay 70% of new currency notes of the total amount given to him and keep 30% of the amount with him to provide such a service. This would have left Ramesh negligible margins after paying for the loan and the interest amounts. He would have received nothing for all the hard work he had done. Also, he would not have had money to look after his family and send his children to school. However, the problems did not end here. Ramesh found him stuck in a loop of one problem leading to another problem. He could not see himself reaching a solution and ending of all his woes looked like a far-fetched dream to him.

References

- Business Standard (2016) *At Azadpurmandi, Wealthy Agents Getting Coolies to Double up as Cash Mules to Exchange Old Notes* [online] http://www.business-standard.com/article/economy-policy/lack-of-money-choking-azadpur-mandi-116111900364_1.html (accessed 2 May 2018).
- Governance Now (2016) *Demonetization in 1978 Didn't Impact Common Man*, Retired Banker [online] <http://www.governancenow.com/news/regular-story/demonetization-in-1978-didnt-impact-common-man-retired-banker> (accessed 3 May 2018).
- Live Mint (2016) *Demonetization is a Net Positive Move* [online] <http://www.livemint.com/Opinion/6FJKaHXaq9lqCYeI93NYsN/Demonetization-is-a-net-positive-move.html> (accessed 3 May 2018).
- Mittal, S. and Kumar, V. (2018) 'Adoption of mobile wallets in India: an analysis', *IUP Journal of Information Technology*, Vol. 14, No. 1, pp.42–57.
- Singh, S. (2014) *Agribusiness Franchising in India: Experience and Potential*, Indian Institute of Management Working Paper No. 2014-12-09 [online] http://vsllir.iima.ac.in:8080/jspui/bitstream/11718/17160/1/WP_2014_12_09.pdf (accessed 3 May 2018).

- Singh, S. (2016) 'Rethinking diversification of agriculture in the Indian Punjab: an examination of strategy and mechanisms', in *Economic Transformation of a Developing Economy*, Springer, Singapore, pp.77–96.
- Smart Indian Agriculture (2016) *Demonetisation: Farmers are Dumping Vegetables at Delhi's Azadpur Mandi at Slump Prices* [online] <https://www.smartindianagriculture.in/demonetisation-farmers-are-dumping-vegetables-at-delhis-azadpur-mandi-at-slump-prices/> (accessed 5 May 2018).
- Srinivas, H. (2015) *The Identification of Informal Credit Suppliers*, GDR Policy Analysis Series E-066 [online] <http://www.gdrc.org/icm/identi.html> (accessed 3 May 2015).
- The Economic Times (2016) *What is Demonetization and Why it is Done?* [online] <https://economictimes.indiatimes.com/news/economy/policy/what-is-demonetisation-and-why-was-it-done/articleshow/55326862.cms> (accessed 3 May 2018).
- The Tribune (2016) *Commission Agents Offer Farmers Banned Notes* [online] <http://www.tribuneindia.com/news/himachal/commission-agents-offer-farmers-banned-notes/325159.htm> (accessed 3 May 2018).
- World Atlas (2017) [online] <https://www.worldatlas.com/articles/countries-growing-the-most-broccoli-and-cauliflower-in-the-world.html> (accessed 20 April 2018).