Farmer Report

Punjab Lok Sujag; FR 01/08; September 2008



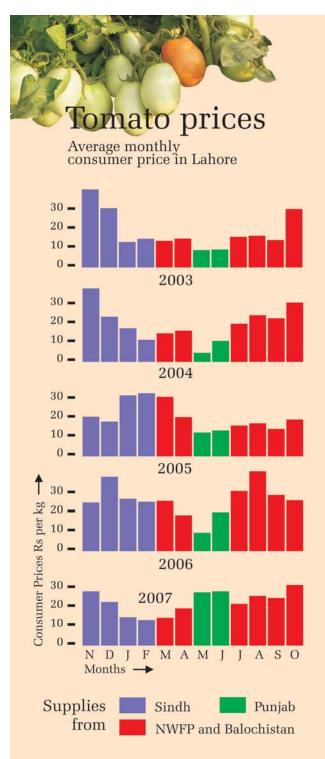
Keep the buck, pass on the risk

Traders make small resourceless tomato farmers bear the brunt of market chaos as policy makers sit pretty

Inelastic, all season demand is supplied by diverse regions

Tomato is an essential ingredient of urban cuisine. There is hardly any recipe that could avoid it. Tomato consumption is devoid of any seasonal factors as well. This results in a strong, inelastic and year-round demand for this agricultural produce. There is no factor that could bring down its demand at any time of the year. It however could surpass the average for a few days around yearly festivals like Eid when the entire population indulges in festive cooking. Tomato however is not an all season crop. It can

be grown at certain places during certain time of the year. The traders thus find it difficult to fulfill the year-round demand. Pakistan is bestowed with a vast land with varying climates at any given time of the year. This has facilitated the traders to source tomatoes from different corners of the country at different times. So when the tomato season is off in Punjab, it is supplied by Balochistan and NWFP and when they get out of it, Sindh starts loading the trucks. That is why tomatoes in Lahore market come from as far places as Killa Saifullah in Balochistan, Wana in tribal areas, Swat in NWFP



These prices have been taken from the wholesale and retail price lists issued daily by the market committee in Lahore's main vegetable market. Though the retailers are generally bound to display these rate lists at the point of sale, nobody follows it. Actual market prices may be 10 to 25 percent higher than these. This is however the only available source of the history of the prices of these commodities and is anyway good enough to reflect the monthly trend.

and Badin in Sindh. The transportation charges from these places to the markets have a bearing on tomato prices.

Prices are highly volatile

Tomato prices go through a breathtaking roller coaster ride throughout the year. It can be available at as low price as Rs 5 per kg and shoot up to some thing like Rs 60 or even 100 within a span of few days before humbling down to something like Rs 20 in next couple of days. The most important factor causing this high fluctuation is however not the transportation cost from various parts of the country. The tomato distributors (aarhtees) follow simple thumb rules of demand and supply. Tomato is a fragile item and can be stored for a maximum of one week after harvesting. In the trade circles the best strategy is to off load its stocks as soon as possible. As the demand is static, the distributors have a fairly good idea of how much will sell at what rate in one day. If the market pays Rs 20 per kg against a supply of 30 track loads of tomatoes in a day and 60 arrive on one particular day, the price is bound to spiral down. But if only 10 of them knock at the market gates one morning, the price will certainly skyrocket. This looks like simple market logic. But who gains and who loses from this volatility is another story and this is the subject of this work.

All market risks are passed on to producers

There are more than one players in the tomatoes' journey from farmer to consumer. A dealer (beoparee) buys it from the farmers on behalf of the distributor. The distributors in urban markets auction their merchandise forward to wholesalers (phareea) in bulk who in return sell it to retailers in smaller quantities. The dealer and the distributor pay back to farmers whatever the price their commodity fetches on the day of its sale after deducting their commission and other dues while

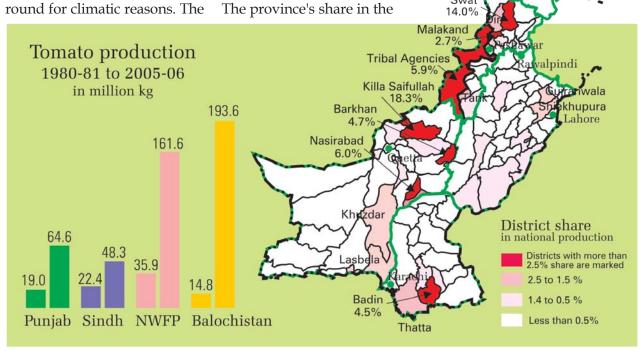
Tomato consumption and production

Pakistanis are not really fond of tomatoes. The world per capita consumption of tomatoes stands at 33 kg while Pakistanis consume less than 3 kg in a year. It has not been a part of our traditional food basket and its consumption was even lower some times back. In 1981 it stood at 1 kg per person per year. It though grew steadily since then. In the 1980s the growth in tomato production exhibited a perfect correlation (of 0.98) with the growth in urban population but the in next decade it weakened to 0.71 yet it improved its correlation with the growth in total population from 0.98 in 1980s to 0.99 in the 1990s. This effectively means that tomato consumption which has earlier been an urban phenomenon only is now spreading to rural areas. Strong demand in urban centers has spurred tomato production in areas surrounding the large cities. But none of them can supply the city year

gap has offered an opportunity to small farmers of the far flung areas where the climate suits tomato production in the period when the urban neighborhoods cannot grow it. Top ten tomato producing districts of the country have a 60 percent share in overall national production. Their share in country's population is however four percent and in urban population it is a meager one and a half percent. Currently Balochistan contributes over 40 percent in the country's overall production. The share of Killa Saifullah district of Balochistan alone stands at 18 percent while Swat district of NWFP chips in another 14 percent. Overall tomato production has quintupled during the past quarter century (92 million kg in 1980-81 to 468 million kg in 2005-06). During the same period tomato production in Balochitsan has however gone up 12 times raising provinces share of 16.1 per cent in 1980-81 to 41.4 per cent in 2005-06.

country's population however remains close to just five percent. Both these facts imply that the farmers in these areas grow tomatoes in response to the commodity's demand in other areas as a cash crop. The same trend can be observed in other tomato producing areas. In Punjab, districts of Gujranwala and Nankana Saheb produce 22 percent of the province's total production. Both the districts are in close vicinity of three large urban centers Lahore, Faisalabad and Gujranwala itself.

Muzaffargarh is the third largest tomato producing district of the Punjab with a share of 9.2 per cent. The district is next to Multan, the biggest urban center in southern Punjab. Muzaffargarh and Multan jointly host the province's 7.2 percent urban population.



the wholesalers and the retailers add their margins on top of their purchase price to sell it to consumers.

The dealers and the distributors charge their commission as percentage of sale price. This means that if they sell 10 truck loads at Rs 20 per kg; or 20 at Rs 10 per kg or 5 truck loads at Rs 40 per kg, their net earning remains the same. The same is true for the wholesalers and the retailers as they will add their margins and pass it on to consumers. They however sell less quantity when the price is high and more when it is cheap. This effectively means that all the players in the tomato trade are able to safeguard their interests by raising or lowering the price and through this mechanism they shift the entire burden of volatility on to the farmers.

The farmers can earn reasonable profits if they could bring their produce to the market on the

day when the overall supply is short of demand. But if they are out of luck and their merchandise arrives at the auction dock when the supply exceeds the demand, they can only repent and end up indebted.

How could a farmer know when to sow or harvest or bring his produce to the market? There is no way one could know or even predict on his own about how many trucks will reach the market gates on what day. The tomato farmers are spread all over the country. They are invariably small tenants with a maximum of two acres under plough. There is no market or state institution working between them and the demand side. Their decision to grow tomatoes in certain quantity is generally based on a shoddy assessment of how did they fair in the last season and their act of the harvesting and taking it to the market is determined by the nature, that is they



Tomato growers are small farmers working on rented lands and with borrowed capital. They are scattered all over the country. They cannot on their own have any idea about how much of their produce is demanded in urban markets.

Dealers are the main link between farmers and distributors. They are in fact distributors' agents in the field. They bind farmers by offering them cash advances on behalf of distributors and later forward their produce to distributors.





Distributors are the kings of trade. They operate from urban vegetable markets. They auction truck loads of tomatoes that they receive via their dealers and charge commission on each sale. They have huge capital and are able to make all others serve their interests.

have to pick their crop when it is ready and ripe. The government is oblivious and the market doesn't care as all of its players have worked out ways to ensure reasonable returns at any market price passing on all the risk to the hapless, resourceless and unorganized small farmers.

Tomato is produced by food insecure tenants

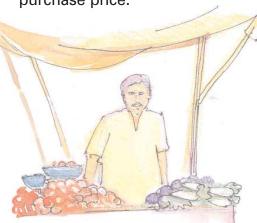
An overwhelming majority of the tomato growers is of landless tenants, who acquire small pieces of land on rent for vegetable cultivation. During our visits to the four tomato districts of the Punjab, we could not identify even a single tomato cultivator with five or more acre land. The tomato farmers like most of the other vegetable farmers belong to menial 'non-agrarian' classes. The medium and large landowners in

many areas look down at these crops with contempt and consider this as job of lowly people. Tenants in Punjab have to pay the land rent in cash and the owners have nothing to do with whatever the tenants grow. In Balochistan however tenancy takes the form of contracted labor. In the northern Pushtun belt of Balochistan that grows tomatoes, a bazgar has a one third share in the produce under the agreement that binds the owner to provide all the cash inputs and the bazgar to do all the manual labor on the farm. In some areas bazgar also has to pay for the cash inputs in proportion to his share, that is one third. Bazgar is essentially a contracted laborer whose wages are attached to the market price of the produce. He shares the market risks with the land owner and his condition is worse than the farm laborer in Punjab who charge wages in cash at a certain rate whatever the market prices of the



Wholesalers also operate from vegetable markets. They buy tomatoes from distributors through auction in bulk and offer it to retailers in smaller quantities after adding their margins. They have credit arrangements with distributors.

Retailers shop from the vegetable market in early morning. Retailers operate from shops and sheds and vend their merchandise on push carts and donkey carts. Their scale of business is very small and margin per unit quite high. They generally charge 50 to 100 percent over their purchase price.



Vegetables are generally shopped by women and they prefer door step deliveries of fresh tomatoes in very small quantities every day. Their choices are very limited.

farm produce.

In Punjab tomato nursery is grown in late October and harvested in May and June. The Balochistan farmers sow the seeds in February and reap in July and August. This overlaps with the wheat growing season. This means that these farmers do not grow the main staple food and have to buy wheat from the market.

Notwithstanding the seasonal overlap, it is financially not feasible to grow wheat at the land rent that they have to pay to their land lords. In other words if the tomato market fails them, they have to go hungry.

Tomato farmers are bonded producers

An acre of tomato crop requires a cash input in excess of Rs 30,000 over a period of seven months. This is beyond the financial capacity of most of these farmers. They almost always have to borrow money or purchase inputs on credit. The tomato dealers and distributors are always 'generous enough to offer this support' to the poor framers under the condition that they will sell their produce to them and pay back the loaned amount with interest. The price of their produce is however not decided in advance and it remains the market price of the particular day of sale. The government and private banks prefer to stay away from this financial sector. Moreover, the banks offer credit financing facility to the landowners only and not to the tenants. The farmers are left with no option but to seek money from the distributors.

The distributors send millions of rupees to their agent dealers in different areas for loaning these to farmers. As the farmers are then bound to supply their produce to that particular distributor, it helps the distributors ensure year round supply of tomatoes from different corners of the country. The distributors pay the farmers the price that their produce gets in the market, after deducting the dues. This includes the money borrowed by the farmers for crop inputs and the interest which is any thing from 10 to 20 percent.

Farmers are punished for producing more

Tomato is grown on 114,000 acres in Pakistan (2005-06) by almost the same number of farmers. Farmers in Punjab and Balochistan get around 5,000 kg from their one acre plot while in NWFP it is around 4,000 and in Sindh just 2,000. The national average of around 4,000 kg (around 100 maunds) per acre is on the lowest in the world. The top global performers like Netherlands and UK harvest 180,000 kg per acre. Even the world average is three times the Pakistani yield. While the high tech inputs that the Western farmers are used to may not be feasible or advisable in our local context, there is still a lot that can be done. But even basic improvements in farming ways need cash inputs that are not affordable for these resource-poor producers. Moreover, the chaotic and completely disorganized market does not reward greater output. It in fact punishes farmers for producing more by lowering the price below the cost of production. On the other hand low per acre yield keeps the farmers' gains to a bare minimum level even at reasonable market prices.

Market prices don't even guarantee minimum wage to farmers

The distributors receive the produce of their bonded providers through their field agents, the dealers, and auction it to the wholesalers. If the farmer is lucky enough he may take back some cash home after paying for the distributor's commission and the deduction of loaned money with interest. At times he knows that at the prevailing market price he would get literally nothing after the deductions but is duty bound to take his produce to the distributor to avoid indebtedness. At others however he finds this indebtedness a lesser evil. When the market price falls below even the transportation cost, it becomes unfeasible to take the harvest to the humiliating markets. In May 2008, Punjab markets were glutted with tomato. We observed in Gujranwala and Sahiwal markets

farmers were paid Rs 10 for a 12 kg bundle of tomatoes. Tomato was available at Rs 4 per kg to the consumers in Lahore during this time. The least cost of transportation is Rs 2 per kg. In this situation the farmers accept the indebtedness as their fate and dump their produce on the nearby roadside for the market vultures to scavenge. The dealers roam around this time and buy the nearrotting mounds at half of the rock bottom market price and sell these to their distributors in cities or to the bulk industrial consumers.

Lahore market is fed by growers of Gujranwala, Nankana and Sheikhupura in May and June. These are the most miserable tomato farmers as they grow the commodity for Lahore in the season that is favorable for this crop almost all over Punjab. As is evident from the month wise price graphs, the supply from Punjab almost always forms the yearly trough. The Punjab farmers are punished because they produce during the period of local abundance. Unlike farmers of the other provinces, they do not enjoy the luxury of diverting their produce to other markets if one is not offering reasonable prices.

Multiple pickings, mixed cropping is farmers' only saving grace

Tomato crop is not harvested completely in one go. In fact the vegetable is picked around 15 times during the two-month harvesting season - twice every week or even on alternate days. This provides the farmer some saving grace. As the market price tumble and rise everyday, they always hope that at least one of their pickings will hit the market on an opportune day and make up for the losses caused by other pickings. In fact the farmers never expect all the 15 pickings to be profitable for them and are only eager to look for the ones that will pay up for their expenses and then for those that may help them earn some cash. The other players in the tomato trade however never have to worry. They earn on all the 15 pickings by the farmers whatever the market price.

Tomato is not an independent crop in Punjab and

is cultivated by the farmers, who grow other vegetables as well. Uncertain of returns on tomato, they prefer mixed cropping and grow one or two other small cash crops along with tomatoes. In Rojhanwali village of district Bahawalnagar, most of the farms were mixing tomato with onions and sugarcane (of *ponda* variety used for making sugarcane dices sold by vendors as a food item). They were cultivating these two crops on very small plots cut out of their less than two acre rented land. This mixed cropping is their best bet to survive through one lease year.

Uncertainty forces farmers to abandon tomato cultivation

The farmers' mitigation strategy has limits. If tomatoes make them indebted, they are forced to pay the return from other crops. Recurrent losses also make them abandon the cultivation of tomato altogether. The reduced supply in the next season however ensures good returns to the few farmers who had taken the risk of growing the same crop despite losses in previous season. Good returns to the few work as an inspiration for the others to revise their decisions in the next season. A good price in second successive season starts the race for growing more in the coming season and the market again ends up glutted with the commodity with dirt cheap prices and vicious cycle again comes back to the starting point.

In 2004, the average of May-June tomato consumer price in Lahore was Rs 8 per kg. (It was in fact Rs 4.8 in May but climbed up to Rs 11 in June). The next year it rose to Rs 13 as the supplies stumbled in these two months supplied by Punjab farmers. It further rose to Rs 15 in 2006. But the farmers were not able to make gains in the wake of rising input costs and many abandoned the crop resulting in a sky high price of Rs 28 in 2007. The price ensured reasonable returns to the lucky few and also invited everyone to join the fray. In 2008, the market was buried under mounds of tomatoes and it sold at Rs 4 per kg ruining the wishful farmers.

How much does it cost to grow a kilo of tomatoes?

The inputs costs for vegetables and fruits vary from area to area and farm to farm. Different climates and soil conditions have different requirements. Farmers work under different conditions and agreements with other stake holders like land owners and financiers. Distance of farm from the main market is also an important factor. We are here detailing the input costs that are incurred by a tomato farmer in Gujranwala or Sheikhupura producing for the Lahore market. This has been

supplemented with the information about farmers of Killa who also produce for Lahore and other markets.

Land Rent

A majority of tomato-growers are tenants who pay at least Rs 13,000 per acre rent in a year. The land rent may vary from Rs 8,000 to 20,000 or even more but in most of the tomato growing areas of the Punjab, the average falls around Rs 13,000 per year. Tomato crop occupies the land for seven months. The share of tomato crop in the yearly rent thus becomes Rs 7,580.

It takes tomato plant five months to mature and bear fruit. Tomatoes are then picked for next two months as and when they ripe.

October and seedlings are transplanted in November. As many as 120-140 grams of seed are required to prepare nursery for one acre. Seed is sown in raised beds prepared with a growing media of farm yard manure, soil and sand and covered with thin polyethylene sheet. The seeds germinate in 7-14 days. It normally takes Rs 1,500 to prepare seedlings for an acre of tomato. However, frost and severe chill can destroy the seedlings so a farmer has to plant seedlings more

> than once doubling or at times tripling the cost of sowing. One person can complete transplantation of seedlings in less than a day on an acre of land.

Water

Tomato is a water-intensive crop. The crop in Punjab is generally flooded at least 15 times from transplantation to final picking. (The agriculture department recommends 30 times water flooding for better crop.) It simply means that crop is watered on every alternate week. The cost of watering varies from region to region. In fact availability of rela-

tively cheap water is the major factor that allows farmers of one area to choose this crop and bars others. A farmer in Gujranwala and Sheikhupura spends Rs 200 per acre for each water flooding and the total cost comes out to be Rs 3,000. In other areas like Bahawalnagar the water cost may double or even triple due to deeper water table, low availability of canal water and high cost of electricity or diesel on pumping.

sive ploughing and wallowing through tractors. It is the only machine cost involved in tomato cultivation. Land is ploughed deeply at least 10 times and is wallowed at least six times to prepare water beds. The deep plough costs Rs 300 per acre for once with rented machine and wallowing Rs 150 for one trip. It cumulatively becomes Rs 3,900 for a one-acre farm.

Water beds are created in the land through exten-

Seed and sowing

Land preparation

For main season in Punjab, the nursery is sown in

Manure and Fertilizers

10 tones per acre of farm yard manure is applied at the time of land preparation for maintaining fertility of the soil. One or two bags of DAP, two bags of Urea, one bag of potassium or zinc are



Though small tomato farmers grow a cash crop, they do not operate as entrepreneurs. They cannot and do not think in terms of profits. They count mere survival through a season as their success. They are in fact bonded laborers of land owners and tomato distributors with no guarantee of even earning minimum wages.

normally used by Punjab farmers. DAP bag was available at the advent of current season at the rate of Rs 1,400 per bag while Urea was available for Rs 600. Potassium or Zinc fertilizers were priced at Rs 300. Total fertilizer cost for tomato crop in previous season was Rs 5,000 per acre. Fertilizer prices have doubled since then.

Pesticides

Various pesticides are applied to fight tomato diseases like Fusarium wilt, Bacterial wilt, Early blight, Damping off and other viral diseases. Haryali, Sundaphas, Chloropeliphas and Meltex etc are known brands to fight these common diseases. Haryali is available for Rs 250, Sundaphas for Rs 150, Meltex for Rs 200 and Chloropeliphas for Rs 250 per packing. More than 10 pesticide sprays cumulatively cost Rs 3,000.

Maintenance

Tomato needs utmost care and maintenance. At least five *godis* are considered a must. The labor cost for each *godi* in Gujranwala area is Rs 1000, so Rs 5,000 are spent on the maintenance.

Harvesting

The crop is picked 15 times with the interval of four to seven days. Rs 250 are paid to the laborers for picking tomatoes from one acre. Rs 3,750 are spent on harvesting the entire crop.

Packing

The Punjab farmers supplying markets at around two hours drive do not pack the tomatoes properly. They tie these up in bundles using sheets of fertilizer bags etc. A sheet costs Rs 5 and can hold upto 15 kg of tomatoes. The distant farmers of Balochistan supplying the Punjab markets however have to invest in packing as well. Killa Saifullah is no less than 24 hour drive from Lahore. The farmers here pack tomatoes in wooden crates. A crate holding 12 kg tomatoes is costing Rs 42 these days. The used newspapers with which the crates are lined before filling are available at Rs 36 per kg in the far away area. Crate packing of tomato costs the farmers Rs 4 per kg.

Transportation

Transportation costs vary greatly depending on the distance from the target market and also on the amount of tomatoes to be transported. The small growers of Bahawalnagar can load their tied up bundles on the top of a passenger bus enroute to city market. Growers of Gujranwala can share a tractor trolley to take their produce to the Lahore market. It costs Rs 2 per kg to the farmers of Gujranwala to get to Lahore. For the average produce of an acre (132 maunds, 5280 kg), the transportation cost is Rs 10,560.

The farmers in Killa saifullah have to hire trucks to transport their crates to 700 km away Lahore





Farmers in Punjab avoid packing expenses by loosely tying their produce into bundles while those in far away areas have to pack them properly for long hauls. Tomatoes from areas outside Punjab are priced higher but this does not mean that these producers fair better than their counterparts in Punjab.

market. A truck loaded with one thousand crates charges Rs 45,000 fare. Besides this the farmers have to pay the small load vehicles Rs 10 per 12-kg crate as fare from the farm to the truck station. The farmers also have to bear Rs 2 per crate for each of the three loading and unloading operations that is unloading from smaller vehicle at local truck station; loading onto the truck at local station and then unloading at the destination. The transportation cost for the Balochistan farmers comes out to be Rs 6 per kg or Rs 31,680 for the produce of an acre.

Management cost

Growing tomatoes is an effort intensive undertaking. The crop needs constant care and the grower has to deal with a number of other stake holders. It is a full time job for one person to grow tomatoes on two acres of land. The tomato farmers in Punjab generally have to perform the following duties that are not included in any of the above: 15 waterings, 10 sprays of pesticides, application of three fertilizers, permanent watch against birds that can destroy fruit, arranging finances, purchasing inputs, hiring transport, arranging for and managing pickers or other laborers, transportation to market, dealing with distributors etc.

Balochistan farmers working with *bazgar* system of tenancy, do not have to bother much about the farm chores. Since *bazgar* is paid a portion in the produce, it is expected that he will be as careful and dutiful as the farm owner himself. The farm owner however has to keep tabs on the market and liaises with the dealers and the distributors in far away cities.

Most of the government agri-economists tend to ignore the cost of farm management that keeps the farmers and his family accomplices busy laboring for months. We find it unfair. We are here including the government approved minimum wage (Rs 6,000 per month) for the seven months as the management cost. Since one person can manage a two acre farm, the per acre management cost comes out to be Rs 21,000.

Commission

As the produce reaches the vegetable market, the distributor holds the auction that is participated by the wholesalers. The farmer waits anxiously besides the truck or keeps waiting in his town for the telephone call about the rate he has been able to secure. Whatever the rate, the distributor deducts a six to seven percent commission from the auction price.

Base price

Following is the summary of per acre cost of growing tomatoes in Gujranwala or Sheikhupura districts for Lahore market.

1: Land rent	7,580
2: Land preparation	3,900
3: Seeds and sowing	1,500
4: Water	3,000
5: Manure and fertilizers ¹	5,000
6: Pesticides	3,000
7: Farm maintenance	5,000
8: Harvesting	3,750
9: Packing	1,750
10: Transportation	10,560
11: Farm management	21,000
Farm gate cost	66,040
12: Commission on sale ²	4,625
Base price	70,665
Average produce (kg)	5,280
Per kg base price	13.38

- 1: This cost is based on fertilizer rates of the previous season in Punjab. The prices have since then almost doubled.
- 2: This is the commission charged by the distributors at the rate of 7 percent of the auction price. The commission amount here is calculated on the supposition that the commodity is auctioned at the Farm gate cost price.

If other smaller taxes and charges are also accounted for the base price for Punjabi farmers supplying in May and June shall be around rupees 13.50 per kg.

The base price for farmers of other areas is much higher as they have to make additional expenses on packing and transport for supplying during rest of the ten months. Killa Saifullah farmer spend Rs 10 per kg on packing and transportation to Lahore.

How much do farmers earn?

If the profit margins of wholesalers and retailers are added to the base price, it will translate into a consumer price of Rs 22 per kg. This means that when consumers in Lahore are pay-

ing 22-24 rupees for a kilo of tomatoes in May and June, a Punjabi tomato farmer is earning minimum wages for his seven month labor. However as a commercial entrepreneur he is only breaking even at this price and is not earning a single paisa in profits.

Following are the average monthly consumer prices of tomatoes (Rs per kg) for last five years in Lahore.

	2003	2004	2005	2006	2007
May	9.22	4.77	12.57	9.71	28.16
Iune	9.52	11.13	13.72	20.50	28.73

It is evident that only in 2007, the farmers could get more than the base price, they not only got basic minimum wage but also earned Rs 5,000 per month per acre from this seven month crop. But this 'boom' was preceded by four slump years which had forced many farmers to abandon tomatoes resulting in short supply and higher prices. Or in other words the spoils of this boom had been shared by only some of those who had been growing tomatoes during last four years. Moreover, the farmers making gains in 2007, did so after making loss for four consecutive years. It can assumed that hardly any of them might have been able to take the additional gains home after paying for the debts incurred during past years. For the farmers of northern Balochistan (Barkhan, Loralai and Killa saifullah districts) a consumer price of Rs 33-36 per kg means they earn minimum wage and no profits. They supply Lahore in August and September.

	2003	2004	2005	2006	2007
August	16.83	24.72	17.50	42.05	26.32
September	14.48	23.10	14.48	29.60	25.17

Following were the average consumer prices in

Lahore during past five years.

This shows that only once during last five years, the farmers of northern Balochistan were able to make some profit.

What is to be done?

The main issue behind the plight of small tomato farmers is the utter lack of coordination between the demand and the supply sides. Resourceless and disorganized farmers scattered all over this vast country can in no way have any clue about how much is demanded in which market and when. This results in a cycle of gluts followed by shortages. This chaos is a profitable opportunity for all the stakeholders except the farmer. A glut is sure to ruin farmers but it does not bother consumers who buy it cheap and consume more or shopkeepers, wholesalers or distributors who sell it at low price and in greater quantities. A ruined farmer in fact helps distributors bond them and ensure supplies in coming seasons.

The problem is not unique to Pakistan. It is in fact a global phenomenon and wherever the farmers are protected, it is through the intervention of the State.

In developed countries, the agriculture marketing departments calculate the demand for a commodity in the coming season. The total expected demand is divided among the farmers as Production Quota. It binds and/or limits farmers to produce a commodity in certain quantity and supply it to the market at certain time. The market in turn is bound to buy only from these farmers. A similar system is adopted by big chain stores that calculate their demands and enter into supply contracts with farmers.

Many corporate consumers of agriculture commodities have adopted this method of Contract Farming in Pakistan as well. Their impact however is very limited besides the fact that they do not pre-fix the purchase prices denying the farmers the financial assurance that they need so badly. Fixing of Base Prices for agricultural produce and ensuring these through various direct and indirect interventions in the market is still practiced by the governments in a number of countries around the world.

Cooperative farming is another option. It can help small farmers act as a bigger and more organized market force resulting not only in better supply and demand coordination but it can also influence matters related to pricing of their produce. But the legal space for the cooperatives has to be defined appropriately by the State. Moreover, a cooperative, though an economic organization, has to defy a number of social, ethnic and caste taboos to come into effective and productive existence.

A third solution, called Community Supported Agriculture, is offered by the conscience and humane consumers in many countries. These consumers realizing the importance of food production form unions that make supply contracts with farmers. Under these agreements they share the natural and the market risks with the producers of their food.

