

Sunflower: The Smiling Face of Lucre

A Study on the Impact of Sunflower Seeds on Women Farm Labor

Roots for Equity
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Section 1: Hand of Fate, Heavenly Disasters or . . . ?

Introduction

The study was initiated to understand the impact of agro-chemical transnational corporations on women farmers and farm labor in Pakistan.

In order to understand the role of transnational corporations on the work and daily lives of women farm labor, a study was conducted in one district of Sindh, the second largest agricultural province of Pakistan. The study focused on the increased planting of sunflower crop in Pakistan, a crop, which is not traditional to Pakistani agriculture.

The reason for focusing on sunflower was based on certain observations of the Roots for Equity field team, which in the past year had seen increased number of migrant farm labor passing through the villages in Tando Mohammad Khan (TMK). It should be noted that there are certain castes amongst Hindus who customarily migrate for food crops every year in Sindh. However, the migrants seen in the Tando Mohammad Khan were not the routine migrant labor. These included Muslim families, traveling with women and children. Invariably, these groups of migrant labor were looking for farm labor in relation to wheat harvesting.

The Roots for Equity team conducted informal discussions with a number of farm labor setting up camp on vacant land in the TMK area. Information gleaned from these discussion pointed to increased planting of sunflower crops in the Badin and Thatta districts of Sindh, which had resulted in sharp decrease in work being available to sharecroppers and farmers living in that area. As a result, farm labor and even sharecroppers in this area were now traveling to other agricultural towns and villages in search of work, preferably attached to the harvesting of food crops.

Based on this preliminary information, a small survey team went to various areas of Badin to assess the situation of women labor in this area. A number of focus group discussions were conducted with women, in four villages in Golarchi tehsil, Badin district, Sindh.

It was learnt that acute shortage of water in the area had created havoc on people's lives in the particular districts under discussion. In addition to the climatic factors, there were certain other factors, which were leading to the crisis, namely the landlords in the area were turning to sowing sunflower as it was a residual crop and did not need water.

Focus group discussions provided the information that due to sunflower plantation, sharecroppers were finding out that landlords were now only employing them as farm labor and refusing to let them work as sharecroppers. Women farmers complained bitterly about the decreased opportunities for a livelihood, and increasing hunger due to lack of work. On probing further, it seemed that the sunflower seed was part of the dynamics that were resulting in the changed role of sharecroppers in the agricultural production system.

However, the current livelihood crisis in the Badin is linked to a greater tragedy the blame for which can be directly laid squarely on the World Bank. In 1986, the Left Bank Outfall Drain Project (LBOD) was initiated, a project which was funded by the World Bank, the Asian Development Bank and International Development Association (IDA), among others. The Rs 8,000 million project ended up utilizing Rs 30,000 million.¹ The drain was supposed to control waterlogging (a by-product of Green Revolution technologies) by draining saline effluents into the Arabian Sea. The result has been just the opposite with the effluents draining into agricultural land and wetlands. Investigations have led to the Auditor General of Pakistan reporting mismanagement, inefficiency and financial irregularities.²

There has been an ongoing struggle³ against the atrocities carried out through World Bank's 'development projects' and the Bank has actually acknowledged it but is unwilling to take responsibility.⁴

Apart from the LBOD, other major climatic and political issues have resulted in massive shortage of water in the Indus Delta regions and have affected 2.7 million people and nearly 2.7 million acres of land. Thousands of people have been displaced, with over 300,000 fishermen losing their livelihood in the Indus Delta region, because of water being restricted from the upland water sources as well as the above mentioned LBOD World Bank funded project.

The impact of water scarcity has resulted in major shifts in agricultural production in the above region, including Badin, where the study was conducted. Sunflower has been a major crop, which has taken the place of the previously sown traditional crops of the area. However, sunflower production is not merely a response to the water shortage seen in the Delta region. Discussions with Agricultural Extension officers in Sindh reveal the fact that Sunflower has actually been seen as a policy intervention crop for at least 15-20 years. Pakistan is a net importer of edible oil, and hence is a heavy burden on foreign exchange reserves.

With respect to sunflower, first it is of importance that it is a cash crop and hence is lucrative to the landlord, so he is unwilling to share his profits with sharecroppers. Second, the monopolization of the sunflower seed market by agrotansnational corporations has played a vital role in changing the dynamics socio-economic and political situation of small farmers and farm labor in agricultural production. Apart from seed, the crop requires fertilizer which is expensive for small farmers. Hence, for the vast number of small farmers and landless peasantry in the country, the sunflower crop has been increased their hardship.

A scrutiny of the agricultural sector provided the following insight on the issue at hand. Newspapers were reporting 356% increase in sunflower sowing in Sindh.⁵

Sunflower is preferred because it does not consume water directly but is sown on the residual water left after rice cultivation in the previous season. Sunflower can be sown all through the year, but best months are January to March.

Government authorities have been increasing the targets for sunflower sowing on an yearly basis, and farmers have been able to out do these targets every year. According to information from a daily newspaper in Pakistan:⁶

Based on the information it was deemed necessary to conduct a more detailed understanding of not only the sunflower crop but of neo-liberal policis in the agricultural sector which are impacting on the lives of women farmers and agriculture farm workers in the sunflower growing belt.

Sunflower Production Targets and Yields 2001-04				
Year	Target	Yield	T Area	C Area
2001-02	40,827	42,200	38,530	40,600
2002-03	66272	66,272	60,700	63,909
2003-04	105,000	235,683	60,700	171,305
Projections				
2004-05	224,000		129,500	

Sunflower Sindh Projection for 2004-05		
District-wise Targets	Production (Metric Ton)	Area Hectares
Khairpur	950	812
Ghotki	830	607
Sukkur	942	821
Naushero Feroz	800	684
Nawab Shah	963	863
Jacobabad	484	486
Shikarpur	603	680
Larkana	944	809
Sanghar	3,746	2,075
Tharparkar	104	131
Mirpurkhas	32,618	20,141
Dadu	1,202	1,126
Hyderabad	11,808	6,500
Badin	110,275	60,369
Thatta	57,737	33,396

Section 2: Historical, Political Context of Neoliberalism in Pakistan

Our Colonial Masters

The current trends of massive appropriation of surpluses from the agriculture sector in Pakistan are an extension of the trends started during the British *Raj* in the undivided India. The taxation on agricultural produce, especially food crops practiced by the British was a major factor in the historic droughts of 1877-8 and 1896-97. According to Professor Naroji :⁷

“With a pressure of taxation double in proportion to that of England, from an income of one-fifteenth, and an exhaustive drain besides, we are asked to compete with England in free trade? It was a race between starving, exhausted invalid, and a strongman with a horse to ride on.”

In addition, the *Raj* was interested in creating a demand for exportable superior food crops. Hence with the export of the more expensive food crops, there was increased price of the staple grains having vastly negative impacts on the food security situation of the poorest segments of India.⁸

Such a system of land ownership and revenue collection was implemented that the “percentage of the total agricultural land owned or held by non-cultivating holders increased in the twentieth century. The number of people who depended partially on land and partially on labor had increased, indicating the increase of peasant families in western India.”⁹

The conclusion was that on the formation of Pakistan, a majority of the agriculture workers were landless or had small landholdings. In other words:

“Landownership was highly concentrated: owners of holdings of over 40 hectares constituted less than one percent of all landowners in Punjab and NWFP, though they owned nearly one-quarter of the area. In Sindh, 8 percent of all landowners claimed more than 50 percent of the land. Landowners with holdings of more than 200 hectares owned nearly 30 percent of the area in Sindh, although they accounted for about one percent of the landholding classes.”¹⁰

The Pakistani Elite

Pakistan was split from India into an independent state in 1947. Pakistan on its existence, “started courting the US from the start.”¹¹ Maybe it was this

influence that the young state at a very early stage decided to allow the private entrepreneur a free hand in pursuing economic development. In the first industrial policy adopted in 1949 emphasis was put on “creating a new class of industrial entrepreneurs with the country.”¹² There was absolute openness toward welcoming foreign capital for industrial development, allowing various incentives including remittance of profits.¹³

The Pakistani industrial sector was totally dominated by a handful of elite, 22 families according to Mahbub-ul-Haq, Finance minister of Pakistan in 1968. These families wielded immense power on the overall economy of Pakistan. According to White, the Karachi Stock Exchange had 197 non-financial companies listed of which 98 non-financial companies were controlled by a total of 43 important families of Pakistan.¹⁴ Four leading families controlled 25.5% of the assets of private Pakistani-controlled firms, 10 leading families controlled 45.3%, 20 families 58.6% and 43 families 68.65% of the assets.¹⁵

That these powerful groups of elite had no say in government policymaking would be naïve. In fact, they were, and still are, frequently appointed as ministers in the provincial and federal governments, and hold other important positions able to sway government policy based on self-interest. The interests of the industrial and agriculture sector were guarded by each sector. For instance, in return for high level of protection on manufactured goods provided to the industrial elite, the powerful landlords were able to “obtain a blanket exemption of agricultural incomes from income tax.”¹⁶ According to Hasan, “the excessive protection afforded to industry and extensive quantitative restriction on imports resulted not so much in the wrong industries being established but rather excessive profits being generated for the industrialists mainly at the cost of urban consumers and the rural populations.”¹⁷

These families were able to use their economic power strategically. For example, “in the case of vegetable ghee industry (shortening), all of the edible oil for this industry had to pass through the (importer) Liberty-American Tank Terminal Company in Karachi Port. This company was owned by Mr. M.A. Rangoonwala, who was also the largest manufacturer of vegetable ghee.”¹⁸

The political climate in Pakistan during Bhutto’s regime (1972-77) favored socialism, leading to many changes such as nationalization of the private sector operations. This period was followed by the rule of General Zia-ul-Haq, a period which was marked by the Afghan War waged through Pakistan, and the immense ethnic disturbances in Sindh. The Pakistani industrialists faced many upheavals in

this period and it was in this era that Zia was able to restructure the ethnic make up of the business community. The second impact of General Zia's regime was his clear policy to follow dictates of the United States of America.

However, the "fortunes" of many of these families, even after suffering immense financial loss as a result of separation of West and East Pakistan in 1971 and nationalization of private investments by Zulfiqar Ali Bhutto in 1972, did not seem to fall. The chairman of Nishat, Pakistan's largest industrial and financial conglomerate controlling assets worth Rs 192 billion is married to the daughter of another powerful family the Saigols, who is considered the second wealthiest in the list of 43 important families by White in 1970, and again in 1997 by Shahid-ur-Rehman.¹⁹ It needs to be added that the chairman of Nishat, a group which had been listed 15 on White's list, is now considered the richest Pakistani. He, according to Shahid-ur-Rehman, is "accustomed to buying his casual outfits from Bond Street, shoes inevitably from Gucci, cardigans and overcoats from Burberry's."²⁰

The presence of Pakistani elite following the life styles of western capitalists can be seen in the following light:²¹

"Babington Maaulay declared his intention in 1835 to form a class of persons, Indian in blood and color, but English in taste, in opinion, in morals, and in intellect." An Indian scientist, A.K.N. Reddy, has noted that technology transfer has profound cultural implications, for technology "is like genetic material. It carries the code of the society in which it was born...and tries to reproduce that society.... The adoption of a capital-intensive, luxury oriented western culture in India has thus created a dual society – metropolitan centers of western oriented affluence amidst vast expenses of rural poverty, mass unemployment, large migrations to cities and wide income disparities."

No doubt, the lifestyles of the Pakistani elites and the peasants and workers are in stark contrast, where at least 30% of the population is living below the poverty line.

This powerful elite does not only own multiple holdings, but also equity in transnational corporations. For instance, a former finance minister Mr. Babar Ali, has linkages with various national and multinational corporations, having served as chairman for Hoechst Pakistan, Lever Brothers and Siemens. He is also

chairman of Packages, a group that owns 20% equity in Coca-Cola Beverage Pakistan Ltd.²²

According to Hasan, “the redistribution of income in favor of agricultural producers at the cost of urban consumers which took place as agricultural prices were liberalized and export duties on agricultural commodities were phased out, did not help income equality because of the concentration of land holding and agricultural incomes and absence of an agricultural income tax.”²³ According to Khan, in the rural sector, “power was concentrated in the hands of a few whose only contribution to agricultural output was that they owned and controlled most of the land.”²⁴ As has been indicated above, the state machinery supported the power structure of this class.

It is this particular class which will benefit further from the neoliberal policies which were adopted starting in 1991. For example, since 1991, four foreign financial advisors have been appointed by the Privatization Commission to help in its privatization, starting with Bear Stern in 1991, followed by Jardine Fleming in 1993, Mogran Grenfill in 1995 and Goldman Sach in 1998. The last had a contract worth 20 million dollars.²⁵

As Shahid ur-Rehamn states:²⁶

“The irony of the whole exercise is that the foreign debt incurred by the government of Pakistan is not transferable. Thus after privatization these liabilities are only technically transferred to the new owner. Whether or not the new owner abides by the sale agreement, government is required to meet its repayment obligation with respect to the foreign loan of the privatized units.”

It is clear that much of the corruption is being overlooked not only at the national level but also by the pillars of capitalism, namely the IMF and the World Bank For instance:²⁷

“Shahid Javid Burki, senior vice president of the World Bank served as Finance Minister took a conscious decision to sleep over the scandalous default in the payment of balance amount due to the Privatization Commission by the new owners of the privatized units.”

Neoliberalism and Its Impact on Pakistan Agricultural Economy

It is clear that Pakistan has taken a highly aggressive stand with respect to liberalizing its economy with agriculture sector being a key area of focus. The

intensity of importance attached to agriculture can be gauged by a drastic legal change created in the sector, namely the passing of the Corporate Farming Ordinance (CFO) in 2001. The Pakistan Board of Investment (BOI) proclaims Corporate Agriculture Farming (CAF) as the ‘most liberal investment policy’ with Pakistan being in a geographically strategic position as it is a ‘principal gateway to the Central Asian region’. Further, CAF is being promoted by promising ‘market driven policies with least government intervention.’ The idea behind CAF is to offer agriculture land to transnational corporations or local firms for cultivation.

It is clear that the BOI Pakistan is trying its best to promote an attractive image of the country business environment. According to the BOI website “The American Business Council of Pakistan (ABC), a formal association of American conglomerates operating in Pakistan reported the results of an informal survey of their members to get their views on investment climate in Pakistan. The survey concludes that 93% respondents reported improvement in the domestic economy, while 90% reported increase in their gross revenues in dollar terms, with 86% indicated increase in their pre-tax profits.”²⁸ No doubt that these favorable opinions of the Pakistan economy could be based on the new policies enacted in favor of the transnational corporations.

A clear mark of favor toward agriculture liberalization is its new trade policy for 2004-5. This trade policy has earmarked some clear areas for promoting industrialization and liberalization of the agriculture sector. Initiatives include the establishment of the Agro Export Processing Zones (AEPZ) in Sindh. Small export processing zones will also be set up in various towns of Sindh province to collect agro products from the rural areas and shift them to the main processing zone for export purpose. A main processing center will be in Karachi, with sub-centers in Khairpur, Sakrand, Badin, Mirpurkhas, Hoosri, Naushahro Feroze, and Ghotki. The work on the Karachi unit is near completion. According to a news release “Under this project, collection, grading, processing, packing and cold storage facilities will be provided in the main processing centre in Karachi. The government will provide a number of facilities to the investors to invest in the agriculture export processing zone.”²⁹

A similar measure has been announced for two cities, Multan and Faisalabad of the Punjab province. According to the provincial Agriculture Secretary Captain Arif Nadeem (Retd.) “the first agricultural industrial estate will be established in Multan, and land is being acquired for this project while special incentives would be given to the entrepreneurs for establishment of by-products

and it would help in multiplying the agricultural production in Punjab province.”³⁰ This facility would offer services such as post harvest institutions, warehouses, wipe heat treatment plant. Value added industry would also be set up at this site. Other sources inform of the “presence of a well-equipped science laboratory, processing & treatment plant, cold storage, packing and preservation especially for mangoes, flowers and fresh vegetables’ export from Multan, according to the requirements of WTO regime.”³¹

The provincial agriculture provided further information that the directorate of agricultural marketing was being restructured and marketing law was being amended and a bill for the purpose was being moved in the Assembly. Other developments in the offing include the establishment of commodities exchange market and the cotton future market in Karachi.³²

Further, based on the trade policy announced in July 2004, Commerce Minister Humayun Akhtar has pledged to establish agro processing zones in Salam and Risalpur in order to increase agriculture-related exports. Specific value added schemes were identified for Sindh and Balochistan which included “apple treatment plant in Quetta and date processing plants in Khairpur, Turbat and Dera Ismail Khan . . . being implemented through an especially established Horticulture Development Board,”³³ Other measures include development of horticulture products by the Pakistan Horticulture Development and Export Board (PHDEB). According to the commerce minister, “in order to increase the export of value-added horticulture products, the private sector would be encouraged to invest in green houses and cool chain infrastructure, facility of concessional financing would be provided.”³⁴

A concrete policy change with respect to the agricultural sector can be seen in the restructuring of the seed sector. It of course started at the initiation of the World Bank, at a cost of \$56 million, which recommended the participation of the private sector.³⁵

More concrete changes in the seed sector have come with the seed sector being declared an industry in 1994. According to officials from the Federal Seed Certification and Registration Department (FSCD):³⁶

“This policy has encouraged the development of the private sector and several companies have been given permission to produce and market seed in the country. The free market economic policy adopted by the government promotes privatization.”

Further, the FSCD believes that the agricultural sector in Pakistan is now in transition, changing from a subsistence economy to a market economy. In this light a comprehensive package includes the “promotion of wheat and oilseed crops.”³⁷ The policy guideline can now be seen very clearly in its implementation phase. The government is emphasizing the agriculture sector to harvest cash crops. For instance, the Agriculture Research and Extension Sindh has been promoting large scale sowing of sunflower. The sowing season for sunflower encompasses the months of January and February which are also the months for sowing wheat, the staple grain in Pakistan. However, this factor is not deterring the government from its pursuit of increasing sunflower crops.

Sunflower production requires seeds provided by transnational corporations. In Pakistan, transnational corporations supplying seeds are allowed to operate in Pakistan which recognizes that these corporations “may require legal protection to introduce and market their varieties.”³⁸ The privatization of the seed sector is only one link in the broad changes being introduced to allow for a free market economy.

In essence, the neoliberal policies in the agricultural sector are thriving and there are concrete changes which will allow agrochemical TNCs to function smoothly in Pakistan. Given the government’s preference for market liberalization in the agriculture sector, it is critical that extensive research is carried out to understand the impact of these policies on the Pakistani population. Specific attention should be provided to rural communities as they will be the first to be impacted by the major changes being envisioned under the corporate agricultural farming policy.

Section 3: Research Methodology

Based on the literature review, the following study was designed. The research was carried out to understand the impact of agrochemical transnational corporations on women farm labor

The study was carried out in Badin district of the Sindh Province. The reason for conducting the study in Badin was based on the fact that Badin had one of the highest cultivation of sunflower. The three tehsils Talhar, Matli, Golarchi and Tando Bhago were included in the study based on their being major sunflower plantation areas.

A total of 24 villages were included in the case study, eight from Matli, seven from Golarchi, six from Talhar and 3 from Tando Bagho. In each village a

10% random selection of households were included in the study. A total of 51 households were included representing a 10% household sample of each village included in the study.

Villages had no information on their union councils. Hence, villages were not included based on their being part of union councils. Only one particular factor was taken into account on choosing a village, and that was to ensure that both Hindu and Muslim villages were included in the study. Villages were chosen at random, without ensuring if women of the household were engaged in either agricultural production or in sunflower cultivation.

The research utilized both qualitative and quantitative research methodologies. For quantitative data, two different survey forms were used. As the study had been conducted to understand the impact of the sunflower seed on women in particular, one questionnaire was used to collect information from woman farm labor related to her work in agriculture production and its connection to the food security at the household level.

The second form was used to collect demographic data for the entire household included in the survey. This form is a standard one used by Roots for Equity for many researches conducted by it over the last eight years.

The women farm labor questionnaire was developed based on the initial discussions carried out not only with migrant labor and women farm labor in Golarchi but also with women farm labor in the Tando Mohammad Khan area. The questionnaire was piloted in one village in TMK and two villages in Badin. Based on the feedback from the pilot, a final questionnaire was developed which was used for the study.

A focus group with the village members was conducted for collecting information on the socio-economic conditions of the village and agricultural production data pertaining to sunflower production.

Discussion groups were also conducted with various professionals who are part of the agricultural economy, including government servants, transnational corporation sale representatives and seed and other agro-chemical distributors in Sindh and Punjab. Discussions were also held with activists from non-governmental organizations. The basis of the discussions was to understand the impact of agro-chemical transnational corporations in the light of liberalization of the agricultural sector.

The research team comprised of four women and two men, who are part of the research and field team of Roots for Equity.

Section 4: Sunflower, the Smiling Face of Lucre

The data from the survey and focus group interviews has been presented here. The socio-economic conditions of the 24 villages, which are included in the study inform on the type of basic amenities available to the rural population under study. It was found that all 24 villages, electricity was available only in one village (Table 1). Safe potable water was non-existent, and no basic health facilities were available. The level of social services and utilities present show that the villages are at very poor socio-economic standing. Of the schools present, 10 were government schools, and three were being run by a non-government organization.

Table 1. Village Profile		
Facilities	Number of Villages	
	Yes	No
Drinking Water (hand pump)	23	1
Irrigation water	24	0
School	13	11
Basic Health Unit (BHU)	0	24
Electricity	1	23
Road	5	19

Major crops cultivated in these 24 villages include rice, sunflower, cotton, sugarcane, chili, wheat, and barley. A majority of the population was farm labor. In the 24 villages there were 541 households approximately, of which only 70 households had small landholdings. These were spread over 8 different villages (**Table 2**).

In four villages, there were four landlords who had 1000-5000 acres of cultivable land. Another three landlords had 500 to 1000 acres of land in 3 villages. None of the big landlords were living in the villages surveyed.

Land Size (Acre)	Number of Households	Number of Villages
1-15	70	8
16 - 50	39	7
51-100	03	2
101-500	06	6

Demographic Information

Of the 51 households included in the case study, 71% were Hindus and 29% were Muslims. A majority of the respondents were Marwari (33%), Gujrati (31%), and Sindhi speaking (27.5%). Other languages, which were reported, included Seraiki and Maywasi. Of the 51 households in the sample, 2 were non-residents to the villages where the study was conducted; they were migrant farm labor and were present in the village at the time of the study. The remaining 96% were long-term residents of the communities where the study was conducted.

Among the Hindus a total of 10 castes were reported. The most represented castes were the, *Kohlis* (61.2%), and the *Parkariyas* (31%). Other castes reported included *Bheels*, *Rajput* and *Labaris*. Among the Muslims a total of 8 castes were reported of which *Machi* (33.3%) and *Mullah* (20%) were predominant. Other castes included *Mir Behar*, *Kanyiar*, *Qambranis*, and *Chandios* among others.

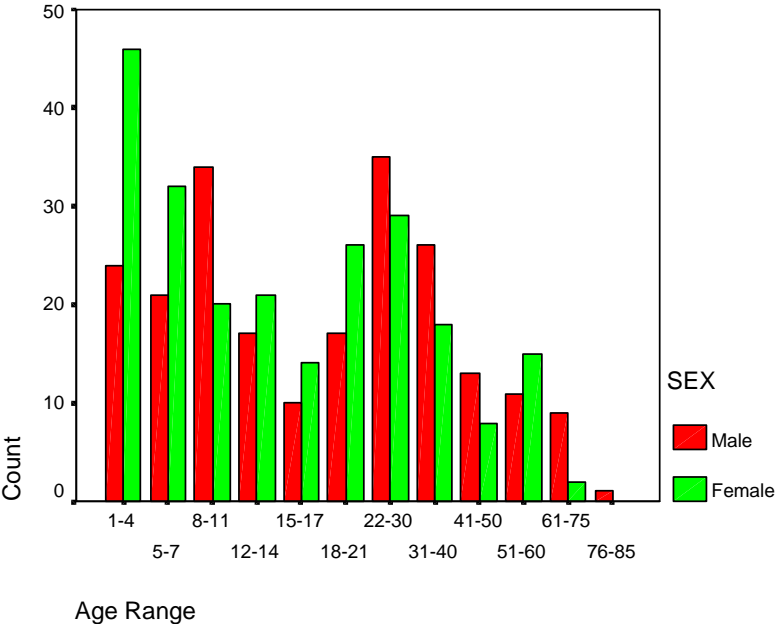
The 51 households comprised of 449 household members. Of these, 51.9% were females and 48.1% males. Of the male population, 42% were married, and of the female 39%. According to the respondents, 65% families were living in a joint family system, whereas 35% were single family units.

The number of household members varied from 2 persons to 22 members per household (Table 3). Only 25% of the sample fall in the range of less than 6 household members. For 75% of the households, members range from 6-22. Forty-three percent of the sample had 6-9 household members. The average household size of rural households according to the government of Pakistan is 7.0.

Table 3. Household Size		
	Household Members	Percent
	5-5	23.6
	9-9	43.1
	12-12	19.6
	17-17	8.0
	22-22	5.9
Total	449	100.0

The household members age range shows a predominance of children and youth. Nearly 40% of the household members were less than 12 years of age, demographics typical for developing countries. The gender distribution of the sample population shows a variation by age groups, with no clear patterns (Chart 1).

Chart 1: Gender by Age



The data collected from the 51 household shows that 75% of the sample had no education. Only 6.5% of the total sample had been enrolled in a primary education center, and only 1% sample had education up to the secondary level. Of the total population only 4% were enrolled in some educational center at the time the study was conducted.

Agricultural Production Factors

Land

Of the 51 households included in the study, only 12% owned land, the remaining 88% were landless. The 12% households who reported to owning agricultural land had the land in the name of male household members. Four persons had land ranging from 1-4 acres, one had 16 acres and another 21 acres of land.

Agricultural Labor Force

In the families, which owned land, only one landowner was hiring farm labor for work, and the remaining were working on the land themselves. In all the six families women were working on the family land. Only in the family which owned 21 acre land did women not go to work on other people's agricultural land, the remaining were working not only on their family land but also as farm labor on landholding owned by others.

Based on the information provided by the 51 households included in the study, one household i.e 2% of the sample falls in the category of a small farmer, as the members were only working on their land, and employing other farm labor for additional work. Another 13.7% were only sharecroppers, and 60.8% were working as sharecroppers as well as farm labor. In the entire sample, 23.5% households were working only as farm labor.

The household survey form yielded data on all household members, i.e. a total of 449 persons. Of these, 276 reported to be involved in paid or unpaid work either in agricultural production or other forms of employment. Of the 449 respondents, 70 children (15.6%) were less than 5 years of age, and 379 (84.4%) fell in the age range of 5 years and above. In this population of 379, 276 (73%) reported to be working. Of these, 46.7% were women. Of the women labor force, 17% were child labor in the age range of 8-14 years (**Table 4**).

It is worth noting that of the entire work force, 20% was based on child labor (8-14 years). If children in the age group 5-17 years are included then the child labor is 28.6%.

Age Range (years)	Labor (All)	Labor (Female)	Labor (Male)
5-7	1.1	0.8	1.4
8-11	8.7	5.4	11.6
12-14	10.1	11.6	8.8
15-17	8.7	10.9	6.8
18-21	14.9	19.4	10.9
22-30	22.8	21.7	23.8
31-40	15.9	14.0	17.7
41-50	7.2	6.2	8.2
51-60	7.6	8.5	6.8
61-75	2.5	1.6	3.4
76-85	0.4	---	0.7
Total	100.0	100.0	100.0
	N=276	N=129	N=147

Sunflower Work Force

Of the 100% labor force, (N=276) 85% reported to be working with the sunflower crop. Of this, the male and female labor force represented 45%, and 40%, respectively. In the male (N=147) and female labor force (N=129) 84% and 86% were working with the sunflower crop, respectively.

In the 51 households, 74.5% were sharecroppers on rice, which is sown in the *Kharif* season, in which the seeds are sown in June-July and harvested in November-December. A little bit earlier than the wheat sowing period is when the sunflower is sown. It was reported in the study that of all the sharecroppers on the

rice harvest many did not carry this status for the sunflower harvest. Of the total 38 households who were sharecroppers, 10.5% had not cultivated sunflower at all. Forty-two percent remained as sharecroppers during the sunflower crop plantation. However 34.2% sharecroppers worked as farm labor on the land for which they were sharecroppers in the rice season. Another 13.1% sharecroppers went to work as farm labor on other people's land during the sunflower harvest. Therefore, in essence 76.3% of the sharecroppers were working as farm labor either in their own (sharecropper) land or other people's land.

Women Farm Workers

One hundred percent (100%) of the women respondents are farm workers. On being asked if they were working in both seasons i.e *Kharif* and *Rabi*,³⁹ a 100% of the sample replied in the affirmative.

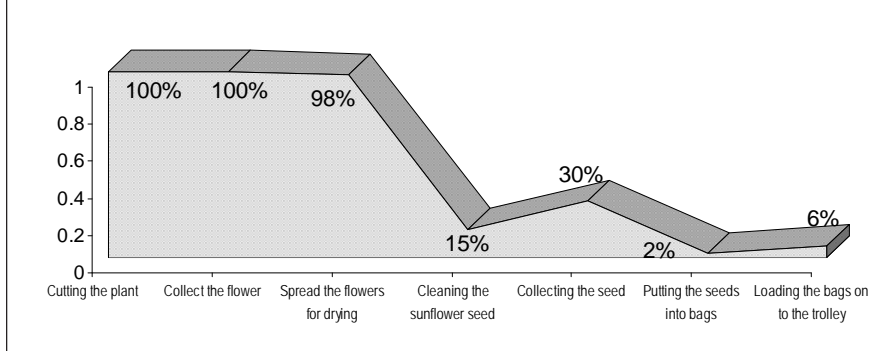
Sunflower Women Farm Workers

On being asked in particular about working on sunflower fields, women in 90% of the households replied in the affirmative. Of the 100% (N=46) households working on sunflower crop, women from 93.5% households participated in work related to sunflower harvesting. Only women from 6.5% households were working during both the sowing and harvesting season on sunflower crops. The women who were participating in the sowing of the sunflower seed were preparing land for sowing the seed as well as in actual sowing. The reason why majority of the women do not work during the sowing season can be attributed to the fact that sowing involves the use of a mechanized drill. This mechanization has basically cut in half the labor intensity of the job and has created a major change in the role of labor in sunflower production.



The process of sunflower harvesting included a number of tasks. Women's participation in the various tasks has been presented in **Chart 2**. In the 46 households where women participate in sunflower harvesting, 100% of the women were involved in cutting the sunflower plant, collecting the flower, and then spreading the flowers so that they could dry before the threshing process starts. Eighty-seven percent of the women also collect the

Chart 2. Tasks Performed by Women in Sunflower Harvesting



stalks from the sunflower plant. Only 4% of the women report that instead of collecting the stalks, tractors run over the stalks so that these would be transformed into natural fertilizer. A much smaller percentage of the women undertake other tasks connected to sunflower harvesting.

Income Distribution

The per annum income for the 50 households in the study was in the range of Rs. 7,000-85,000. Data for one household was incomplete and hence has not been included. The earnings include both monetary and in-kind payments. The total income includes income in kind. If a family reported being paid 1 maund (40 kg) of wheat, then this was converted to earning of Rs 350, the 2004-market rate for one maund wheat. Similar computations were made for other earnings paid in-kind.

It needs to be pointed that nearly 50% of the sample were earning only Rs. 20,000 or less per annum (**Table 5**). There were only two households who were earning in the range Rs 65,000-85,000 per annum, which still amount to only Rs 5,500 to 7,000 per month, not by any reckoning sufficient to provide for the needs of large households.

The incomes of the population being surveyed depict the dire straits of agricultural farm workers in Pakistan. More than 70% of the households are earning 50% or more of their earning in kind, which are basically, wheat and rice.

Table 5. Household Income Range Per Annum & Contributions to Income by Category

Income Range (Rs)	HH Percent	Sunflower Income as % of Total Income	Other Cash Income as % of Total Income	Income in Kind as % of Total Income
7,000-10,000	16	23.7	28.2	47.5
11,000-15,000	22	31.3	15.0	53.7
15,000-20,000	10	19.7	21.7	58.6
20,001-25,000	18	15.0	26.8	58.0
25,001-30,000	8	4.0	20.6	75.0
30,000-40,000	6	13.8	32.5	46.3
40,001-50,000	12	22.3	6.4	71.0
50,001-60,000	4	43.0	32.6	24.4
60,001-65,000	2	17.0	0.0	83.0
85,000	2	0.0	4.1	96.0

This in itself is a very good indicator of the subsistence living of the landless and small farmers and the dependence on food crops for ensuring food security for their households.

With respect to the sunflower crop providing any viable source of income to the sample, the data shows clearly that for the lowest income groups it has not contributed more than 30% of their total earnings. Further, it should be noted that across the entire sample, 36% of the sample has been able to earn only 15% or less of their income from the sunflower crop. The going rate for cutting sunflower crop per acre had been Rs 300. It generally takes two to three workers to cut one acre in two days hence their per day wage would be between Rs 50-75. Generally, the work is carried out by families, hence the number of labor per acre is much higher. During the study, farm laborers were saying that the daily wage should be at least Rs 500/acre.

The need for food crops as well as dearth of a livelihood is evident from the fact that 82% of the households included in the sample had temporarily migrated in the past year in search of labor. A majority had consciously gone for wheat harvesting so that they could be sure of securing the basic staple for their households. A woman commented that they go early and make temporary shelters from dry grass to wait for the ripening of the wheat harvest; in the meanwhile they look for other agricultural work.

It needs to be pointed out that these are household incomes, but women are responsible for much more than 70% of the work. The majority of the income comes from cutting wheat and rice harvests, as well as sunflower, tasks in which women play a dominant role. In addition, in rice cultivation, the seed sowing and transplantation, women form the bulk of the workforce.

So women work for long, backbreaking hours as agricultural workers, but are still unable to earn a living, which would provide them enough to feed themselves and their children adequate meals. Neither are their earnings adequate to provide the household with basic human needs such as shelter, education, and safe drinking water, among others.

Migration by income shows that in each income category more than 70% of the households had migrated. For instance, in the income range 7,000-10,000, 75% of the households had gone away from their village to earn a livelihood (**Chart 3**). It is clear that except for the one household falling in the highest income category, households from all other categories had gone outside their area for work, which is of course understandable as their annual incomes are meager to say the least.



During the study, an interview with a woman yielded the information that she had come here to partake in the rice harvest. She has been at that particular village for only 20 days. A day before she had given birth to a dead child. According to her she was given a wrong drug. Her case well exemplifies the hardship women have to face in search of food and livelihood.

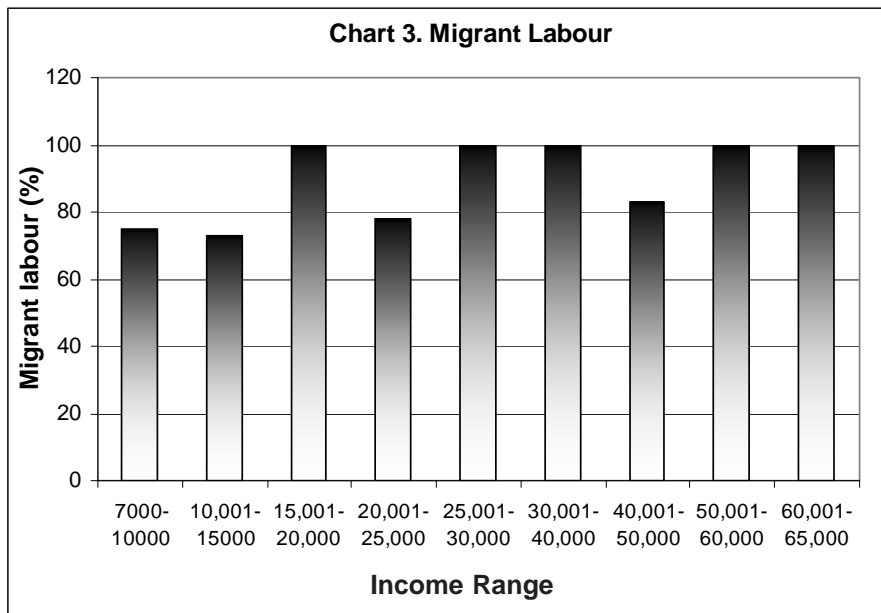


Impact of Sunflower Crops on Rural Communities

Change in Status: From Sharecropper to Daily Wage Labor

In general sunflower cultivation is being promoted quite prominently. In a recent article, it was stated that:⁴⁰

“Small farmers with 5-12 acres who are about 93% of the agricultural community can be attracted toward cultivation of sunflower through provision of inputs like seed, fertilizers, irrigation and credit because these farmers have a low financial capacity”



The writer has been able to very clearly state the case of small farmers of Pakistan. It is impossible for small farmers to produce such high cost crops without provision of subsidies. In the study, a farmer with 16 acres of land is not sowing sunflower because he is unable to afford the cost of the seed and because of the unavailability of water. A sharecropper reported that his landlord did not plant sunflower because of the high cost of the seed.

However, subsidies are not looked upon favorably by international financial and trade institutions such as the World Bank, IMF and the WTO in the free

market economy paradigm, driven by capitalism. This is very much the bone of contention in the agriculture trade negotiations in the WTO.

The above study has shown that sunflower because of its high input cost is unaffordable to the small farmer. The sunflower seed can be sown using a mechanical seed drill. Hence, the entire work of sowing only requires tractor fitted with the seed drill. However, it is an expensive input, which can be afforded only by the higher income farmers. In addition, because of the low labor input and high profitability of the crop itself, the big landlords as well as the medium range farmers are pushed toward not entering a sharecropping agreement with their tenants. In this way they can employ daily labor for work required in both the sowing and harvesting season at abysmally low paying rates, and at the same time not share the highly profitable sunflower seed output with the sharecropper. The impact of increased price of sunflower is evident from this remark “the price of the sunflower crop has increased hence the landlords have increased sunflower production” The impact of government policies in motivating farmers to grow sunflower has brought changes in the cropping patterns in the Badin area.

Based on the data collected for this study, only 4% of the respondents have been involved in sunflower production as of five years previous to the study. At present, 90% of the respondents were working on sunflower crop, and for some such production is relatively new. For instance, one woman (whose family has 21 acres of land) informed the Roots research team that they had sown sunflower for the first time.

A woman remarked that landlords have started using pesticides from this year. Based on the study finding the use of pesticides at the moment is very infrequent. Only in areas where the farmers are providing water for the crop, is there an indication that pesticide is being used. However, this is an added cost, which will further increase the burden of small farmers and sharecroppers. Some respondents stated that the seed were coated with pesticides.

As has been shown in the study a vast number of share croppers (76%) were forced to work as daily wage workers, being paid Rs.300/per acre for cutting the sunflower plant. During the data collection, people would often remark “we are *haris* (sharecroppers) only for the rice crop, and not for sunflower. For sunflower, the *zamindar* only hires us as daily worker” or the situation has changed to such an extent that sharecroppers have been removed totally. As one *hari* reported “*pahle hari thae ab zamindar nay jawab dae de-a hae* (we were sharecroppers previously but now the landlord has removed us.”

This was the refrain which was uttered by the respondents who took part in the study in all the 24 villages spread over 3 districts of Badin, covering an area of more than 250 kilometers. Neither sharecroppers nor labor had a single good thing to say about the crop. According to them, if it had been a food crop, at least they would have had food to eat and store.

The sharecroppers would say, that in the end all that they were getting was the wage labor with no gains from the profitable crop. Many said that there were gains if only the landlord was willing to give them their just share.

Farm labor felt they had nothing to gain except hard-earned meager wages. As one labor put it “How much can one gain from earning Rs 40 in a day? The real benefit is to the Landlord!” Another remarked “All we earn is Rs 30/day after spending the whole day under a scorching sun. We only do it so that we can put some food in our stomachs.”

Share Croppers Increased Economic Burden

Even if sharecroppers are being provided a share in the sunflower crop, there is a lot of pressure on them to cut the harvest. For instance, one woman reported that her husband was a sharecropper on 1/4th share, and they had to look after 6 acres of land. At the time of harvesting, the landlord forced them to finalize the harvesting quickly, and as a result they had to employ farm labor to cut 2 acres of the sunflower crop. The Rs 600 paid to the farm labor was deducted from their share, as cutting the harvest fell under their part of work. In this household there were only 2 workers (she and her husband). The woman reported that her husband fell sick and had severe back ache as a result of the work.

Similar issues were reported with respect to collecting the sunflower seed. As the crop is being cut, the flowers shed seeds. At this point sharecroppers do not have the time to collect the fallen seeds and additional farm labor is employed for this chore. According to the sharecroppers, if there had been time at this juncture they could have carried out the work themselves. The payment for the additional workers is also taken from the sharecroppers' share, an additional burden on their meager income. So in essence, neither the sharecropper nor the farm labor gains any substantial income. The highly acrimonious relationship could be gauged from remark made often about the landlords such as “if somebody dies he will say first finish my work and then you can take care of burial arrangements.”

A sharecropper who had 1/4th share in 14 acre of land complained about the high cost of sharing in the sunflower production. According to them, the landlord was not only transferring the 1/4th cost of inputs on him, but also includes the cost of interest rates as charged by money lenders. It is of course, common practice for the landlord to actually charge interest rates higher than what he has actually paid to agriculture input dealers. The woman of the household remarked that:

“in the end we have nothing but red chilies to eat. If we question the landlord on the input expenses, he is abusive and calls us dishonest. Hence, if we don't find extra work we are forced to take loans from the landlord. .So even after being sharecroppers on sunflower, we are forced to pick red chilies and weed the onions fields. When it is time to sow the rice fields then we come back, as the rice harvest yields food for us.”

This change in the labor status is the hallmark of capitalism, and can be blamed for the overwhelming presence of migrant labor in our rural communities, throughout the developing world. The migration of course does not stop at rural-migration, but forces labor to migrate to not only urban centers, but further in the region.

Sunflower: Food Security versus Profits

Another issue with respect to sunflower is that sowing time of sunflower overlaps with that of the wheat crop. With greater emphasis being placed on sunflower sowing, farm labor suffers greatly, as on one hand it is unable to earn any substantial income from sunflower, and on the other, there is increasing dearth of food crops due to the overlap of the sunflower crop with wheat. As was evident from the above data, rural community goes high and low in search of food crops, especially wheat, which is the staple diet of the Pakistani population.

In the family, which owned 21 acres of land, the farmer had used the women of the household to harvest the rice crop. No farm labor had been employed for this task. This verifies the importance attached to food crops, and steps taken by families to safeguard their long-term food security. Families who had been able to stock sizable amount of rice could exchange rice with wheat from the families who had gone for wheat harvesting.

As one woman had remarked about the landlord's decision to plant sunflower “ *zaminadar kahta hae aisi fasal lagao kae hari fake katae, mare aur*

faida ho (the *zamindar* says let us plant a crop which would result in the sharecroppers going hungry, dying so that I benefit some more.”

Women’s Experiences

The Sunflower Harvest

The sunflower crop has impacted women in a multitude of ways. On one hand women do not have work in the sowing season as that has been mechanized which leaves them with no means of livelihood. On the other hand, they have an intensely difficult work in the harvesting season as well. In addition, this work also brings them very scanty earnings and food insecurity.

The sunflower plant is tall, thorny and hardy; cutting the plant offers many hardships to the labor in this sector, but for women labor it is particularly stressful. Women being of shorter height find it difficult to reach the plant and having to stretch their arms is hard on arms and shoulders. In addition, the thorny plant scratches their thinner skin, the result is many abrasions, bruises and cuts on their upper body. Women complained bitterly of the constant shoulderache and backache, a result of long periods of stretching their hands holding a sharp sickle (Table 6).

Table 6. Physical Stress

Types of Ailments	
Urticaria	47.0
Muscular Ache (Arms/Shoulder/Neck Ache)	55.0
Hands: Abrasions, wounds, skin peeling, swelling	37.3
Body Ache	25.5
Feet Abrasions/Abrasions from thorns	17.6
Backache	15.7
Headache/Fever	11.8
Eye Infections	9.8
Breathlessness/Dizziness	7.8

In addition to the physical hardship in carrying out the work, women are trapped in other ways. Although women or their households are not given the benefits that are right of sharecroppers, they still retain much of the responsibility. For instance, if the household is employed as farm labor, they remain in the long process of cutting, drying and packing the sunflower seed, which takes at least 7 days. The sunflower seed does not ripen at the same time, hence in one acre of land the labor has to cut only those plants, which are ripe and leave the rest. This may take 3-4 days. Once they have cut the plant they are responsible for separating the flower and spreading them out to dry. This takes another 3 days. At the end the seeds are packed into bags and then hauled on to trolleys for transportation out of the fields. So no matter how long the process is, labor is only paid Rs 300/acre. As one woman put it “the landlord only pays us for half the work done, but calls us every day for work.” Another remark was that “although there is really no benefit from the sunflower crop, but still, we are paid a wage and we have to provide for our children.”

The stalk from the sunflower is a product which women wanted for their households so that they could use it as fuel. Women whose families were sharecroppers on sunflower harvest were able to bring stalks back to their homes. The sharecropper families claimed that farm labor could also take the stalk home. However, based on responses of the farm labor families only 11% farm labor had permission to do so. Nearly one third of the respondents reported that the landlords take the stalks themselves who either getting the stalks crushed by tractors or burnt on the agricultural land itself, to be used as natural fertilizer.

The Search for Food

The impact of sunflower crops has created major hardships in the lives of the rural farming community. The migration pattern amongst certain Hindu castes has been ages old. But with the increase in cash crops such as sunflower, rural-rural migration in Sindh is now no more relegated to any particular caste or religion. Search for livelihood and food crops is now a critical need of hundreds of thousands in order to avert hunger and starvation.

In the study sample, 65% of the respondents had gone away from their villages for wheat harvest. Another 4% had also gone for rice harvest, and 8% for cotton picking.

The women who had not gone for wheat harvest had various reasons most of them associated with the health of their family members. One woman remarked that “our landlord does not allow us to go, if we were to go he would not let us

remain as sharecroppers.” In one household, they had a store of nearly 15 maunds of wheat and hence they did not need to go.

For the majority of the respondents who had gone for wheat or any other kind of work, the reason for their temporary migration was: “*kamea gay to khaen gay*” (we can only eat if we work!).

Such remarks were heard in all 24 villages which described the unwillingness of people migrating to work. A woman had said ”if the landlord would provide us work here why would be go to a unknown area? (*apna dais chor kay kuen ja-en*) It is so expensive to go, whatever wheat grain we are able to earn, more than half we consume while we are there. If there is some sickness than that also uses up our store as we sell wheat to look after our medical expenses. After all this, if any grains are left we bring them home.”

Another woman remarked the landlord only plants those crops which give him profit. She described that 30-35 people from her village had hire a truck for going to another region to work. They do not only cut the wheat harvest but also sow the cotton seeds for the next season. She added that at such times if somebody dies, then there is the additional cost of hiring a vehicle for bringing the dead body home.

The cost of travelling from their own village to the location they had found work was based on the number of people travelling. Groups of 30-35 were quite common and were paying Rs 3500 for a hired truck for a distance taking 6 hours or so. Generally, for single person, the transport charges would be Rs 100-Rs 150; this would be more than likely on commercial rather than hired transport. More than often, selling the wheat grains they had earned as their wages generated the transport fare.

Once at the place of work, they would create temporary shelters made out of dried grass, and wood. Women reported making shelters even out of their quilts, especially to provide a shade for their children while they worked in the wheat fields.

Women reported carrying their own utensils to these sites, as they would set up temporary kitchen for their families. Many women would take their children with them, especially if they did not have anybody to leave them. A major hardship was in carrying water back and forth from a water source, such as a hand pump or a watercourse.

Women remarked on the sense of fear and insecurity of setting up camp in a unknown area, often. A consistent voiced fear during the discussions included the possibility of death of a person while working away from home.

Women have to deal with the additional issues of *pardah*, as they do not work with other castes, particularly men. In their own area they do not work in the fields at all, and go out of their area in search of work.

The epitome of what can and does happen to women as they go from one area to another is well portrayed by the following case study:

In March 2004, the Roots for Equity field team noticed that a group of migrant labor had set camp adjacent to one of the villages in which the organization works. On a routine visit villagers informed the team that a small girl had died in the camp. Based on religious norms, Roots team went to pay their respects to the family of the deceased girl. However, on going to the camp it was found the child's father had taken the dead body back to their village, and had as yet not returned. The mother of the child was not in the camp as she had gone to work i.e. to finish the cutting of the wheat harvest, the reason for their having come so far.

In Pakistan, Muslim norms of mourning are that families generally stop all work for 3 days of mourning. In this case, the absolute dire straits of the family and others in the camp were obvious from the fact that in the first place the father had gone alone with the body. Others, not even the mother could afford to go back for the burial. Second, their economic situation was so precarious that even the mother could not take a couple of days off from her work. The child had died of measles, but the disease is of course not terminal. It was the lack of care that had most probably taken the young girl's life; she had been 4-5 year old by their count.

The entire camp had come from Golarchi, Badin, and were Muslims of the *Sheikh* caste. Their camp was in essence nothing but a few low tents erected with the means of poles, using dry grass and old *rallis* (quilts) to form a shelter. There were some beaten looking utensils lying by the open kitchen site. A family was seen eating a mixture of onions and red chilies with dry leavened bread. Most probably it had been made in the morning at the time that women leave for work in the fields.

On subsequent visits to the camp site it was learnt that these migrant labor many thousands in Golarchi were looking for wheat harvests, due to lack of water

in their area, as well as intensely increased sowing of the sunflower crop in their area. This experience of the Roots for Equity field and research team was the basis of this research study.

The situation of the people in the camp is very much reflective of conditions described by women labor that had been part of the study. The descriptions of their camps portrayed the immense misery and strained circumstances they lived for many months of the year, each year, simply to fill their stomachs for the day.

Based on the responses in the study 23.5% would live basically under the sun. Another 51% stated that they made their own shelters. Less than 4% of the respondents had stayed with relatives. For a vast majority (84.3%) food was only available if they were able to secure work otherwise they were depending on loans. Twenty percent of the sample reported taking initial amount of grain with them and the rest they had collected through work. Only one woman had reported that she had stayed with her father and would eat with him. Of the total respondents, 53% reported eating only leavened bread (*chapati*) with onions and chilies. Another 26% reported eating either *chapatii* with onions and chilies, or lentils and vegetables. Nearly 20% of the sample had not been part of the migrant labor.

During the study, women were asked about food cooking responsibilities, and their responses were bitter and sarcastic. They would say “we eat only if we cook! There is nobody who will serve us, or no hotel which would send us ready-made food.” They had to cook for themselves and their families before and after coming back from a long arduous day of work. Except for a handful of families all had taken their children with them.

It is indeed tragic that these months of hardship do not even allow them some months of food security, as they are able to basically earn only enough to exist for the months they stay, pay for their transport back home. In the survey, 33 households reported that they after looking after their expenditures some were not able to bring any grain back home. (**Table 7**). Only two households were able to bring 20-21 maunds of wheat.

This data shows quite vividly that this population is basically living hand to mouth, and has no support system to mitigate any crises in their lives. In essence, the very bodies, which are responsible for providing food to the many millions goes hungry.

Table 7. Food Grain Savings					
Qty of Food Crop Earned (Maund)	No. HH	HH Percent	Qty of Food Crop Saved & Brought Home	No. HH	HH Percent
<i>Wheat</i>					
3-5	4	12.1	0-5	11	33.3
7-9	4	12.1	6-8	9	27.3
11-12	9	27.3	10-12	8	24.0
15-18	9	27.3	16	1	3.2
20	3	9.2	20-21	2	6.2
28	1	3	-	-	
-					
35	1	3	-	-	
<i>Rice</i>					
10	1	3	6	1	3
25	1	3	21	1	3
Total	33	100.0		33	100.0

This is indeed a double irony: the government is promoting sunflower sowing to decrease its edible oil import bill. Maybe one should ask these women if they are proud that they go hungry in service to their great nation? After all they are the ones who are working day and night on a hungry stomach to fulfil the dreams of our policy makers.

Summary

The study here has included an area of more than 250 kilometers, presenting the life of hundreds of thousands of the most marginalized sector of our rural community. The depravity of the people shown here is not really because of climatic factors, as would be suggested by many policy makers but is the results of the harsh free market policies being implemented under the capitalist mindset.

At the start of the study, the role of the World Bank in developing the Left Bank Outfall Drain was highlighted. It is such programs, which never hold the implementers accountable for their heinous crimes that are responsible for the misery of the majority of the people.

Now, the study points to another aspect of interference in the agricultural production system that is a massive push from the government of Pakistan to increase the cultivation of sunflower. Again on the surface, the policy is admirable with goals such as decreasing the edible oil imports. However, the study has shown very clearly, that the crop because of its dependence on imported seeds controlled by agrochemical TNCs, and other expensive agricultural inputs is really not affordable for a majority of the small farmers. In addition, the landless are further marginalized by the cash crop cultivation.

The burden, physically, emotionally, economically, is borne intensely by rural women, particularly those who are part of the farm labor force. The role of a single crop and its impact on the lives of people is astounding. It needs to be said that it is not really the sunflower crop or its seed that is responsible for the tragic conditions of rural populations. It is actually the control of resources such as land, water, and seed that is responsible for the above conditions. In order to understand the reasons for the conditions of our rural communities, it is important to investigate the role of hegemonic control agro-chemical transnational corporations in our daily lives.

Section 5: The Hidden Faces of Lucre

Who is responsible for the manifold miseries of our people? The above study provides an insight to the daily miseries of hundreds of thousands of women, men and children living in Badin and the vast agricultural areas of not only Sindh but also other areas of Pakistan.

Many will say that it is the natural calamities such as the drought in Pakistan, which has to be held responsible. That is an easy scapegoat. But scientific facts go beyond such simple reasoning. Just over a 100 years ago, the famine in India was also blamed on the harsh drought suffered by India. But literature amply proves that in actuality the famine, which took the lives of millions of peasant farmers of India, was a direct result of the avaricious policies of the British *Raj*⁴¹. Similarly, the misery of millions of Sindhi women peasants and their families can be laid on very reachable individuals and institutions, who are directly involved in the atrocious policies leading to the fiasco in the Delta

Company	Qty (MT)	Percent
1.ICI	550	38.5
2.Syngenta	150	10.5
3.Pioneer	120	8.4
4.Monsanto	200	14.0
5.Engro Chemicals	54	3.8
6.Rainbow	235	16.5*
7.Indus Valley	40	2.8
8.Other	80	5.6
<i>Total</i>	<i>1,429</i>	<i>100.0</i>

Region of Sindh.

The sunflower seed is a crucial link to the above change in the crop plantation system. With scarce water available, agricultural policy makers including the government have been pushing for sunflower production. Their argument has been that with more sunflower production, the cost of edible oil imports will go down.

The question to ask is do the women of Badin and other similar agricultural areas actually get even the basic necessities of life? Does the decrease in the import bill improved the quality of life of the poor peasant women and children who are being forced to plant and harvest the sunflower? If not, and it is blatantly obvious that they do not then who *does* benefit?

An area for investigation is of course who owns the sunflower seed. In 1998, transnational corporations such as the ICI, Cargill (now Monsanto) and Lever Brothers were providing 90% of the total sunflower seed requirement.⁴² The scenario according to a recent news source has not changed much:⁴³

“Provincial Director Pakistan Oilseed Development Board, informed a total quantity of 1,429 metric ton seed is available with different seed companies.”

It is important to note that four transnational corporations i.e. ICI, Syngenta, Monsanto and Pioneer/Dupont were marketing 71.4% of the sunflower seed. According to the Federal Seed Certification Department (FSCD), there are 242 national seed corporations but the market share for seed is being held by just four agro-TNCs. Further, these TNCs are not producing the seeds locally, but are importing. ICI, on its web site clearly states that it imports its sunflower hybrid seed. Similarly, Pioneer claims that Pioneer brand corn, sunflower and other hybrids are sold in Pakistan through sales agronomists and dealers.

Apart from the above general observations and seed pricing as seen in the open market in Sindh, the concrete data on the sunflower seed sold by the transnational corporations shows that it is immensely expensive. It was found that for local seed the price was Rs 150/kg. ICI was setting its price at Rs 460/kg, nearly 33% more expensive than the local seed. This has been a consistent problem with respect to sunflower seed being imported into the country by TNCs.⁴⁴

Government officials with respect to sunflower seed availability reported adequate supply of seed. However, there had been a reported shortage of sunflower seed, due to the drought in Australia. Similar reports were being published in Pakistan. Farmers in the study area reported to the shortage of ICI seed in the market. Much of the seed available to farmers was at prices much higher than being quoted by seed dealers. Farmers reported to buying ICI seed in the range of Rs 900-1200/kg. Newspapers were also reporting the shortage and exorbitant seed prices.⁴⁵

The drought in Australia was said to be responsible for the shortage of the sunflower seed in Pakistan. However, it was worth pointing out that these TNCs are capable of using such excuses for ulterior motives. For instance, the dry climate has forced less plantation of conventional canola. Hence this shortage could result in enforced buying of genetically modified canola.⁴⁶

The same can be predicted for sunflower seeds. Hence the control over seeds by TNCs could actually be used by them to manipulate market supply depending on their profit needs, forcing farmers to produce as per availability of the seed. For instance, a farmer in Pakistan complained that although the sunflower seed was very expensive he was still forced to buy because he had already spent a sizeable amount on preparing his land for sowing.⁴⁷

The Seed Companies Association of Pakistan (SCAP) represents the four agrochemical TNCs, DuPont, ICI, Monsanto and Syngenta. The market share of these TNCs is a portrayal of their power in the market. These companies have immense power in the Federal Agriculture department, Ministry of Food, Agriculture and Livestock (MINFAL). A concrete example is that of their interference with the draft of the Pakistan Plant Breeders Act. Monsanto's Managing Director Dr A Rehman Khan had sent a letter to the Seed Certification Department, asking for the removal of a certain clause saying it will be unacceptable to the TNC. The Act had stipulated that if planting genetically modified crops would result in any harm to human health or hazard to the environment, the TNCs responsible for the GM seed would have to cover their losses.⁴⁸ In subsequent drafts the clause was removed.⁴⁹

The influence of agrochemical TNCs and their 'friendly' terms with the Pakistan government is patently visible. For instance according to Pakistan Agricultural Research Council (PARC):⁵⁰

"A farmer gathering was organized ...with the collaboration of Pakistan Oil Seed Development Board (POBD)...in Faisalabad.... Regional Manager, POBD ...briefed the farmers about sunflower production technologies. Deputy District Officer, Agri Extension T.T.Singh, ...briefed the farmers about high yielding hybrid varieties of sunflower and assured marketing of sunflower to different oil mills. He informed th minimum price for sunflower will be Rs 630 per 40kg. A representative of ICI company assured to provide hybrid seed of sunflower at reduced price."

Similar other market-oriented advice provided by the Ayub Agricultural Research recommended sowing sunflowers varieties which included such as Suncom 90, Suncom-110, NK-265, NK-208, IS-3312, IS-897, IS-3107, Highsun-33 and SF-107,⁵¹ many of which are identified with various agrochemical TNCs like Monsanto, Syngenta and ICI.

It is these ties between government officials, the transnational seed corporations and assured markets for big landlords that explain the misery faced by millions of Pakistani landless and small farmers. The blatant disregard for the promises about 'reduced price' of sunflower made by both government officials and ICI is also worth noting.

These TNCs have huge budgets, which are utilized for capturing the market for their benefit. These include a whole range of tactics. Given that the TNCs have captured the majority of the sunflower seed market, it is in their benefit that the government keeps on increasing the acreage under sunflower plantation. The greater the acreage under ‘their’ branded seeds, the greater the accumulation of their profits.

Some of the marketing tactics used by Monsanto in Pakistan have been narrated here. According to a Monsanto dealer in Punjab, Pakistan the company used its agriculture field officers. Their responsibilities include visiting villages and providing farmers with suggestions and recommendation on the best use of their own products. However, some interviews with a Syngenta ex-sales person, their maximum marketing efforts are centered on big landlords, especially those that have corporate style farms. An example provided was of a huge national and international chain providing juices and other confectionery products.

The marketing team also uses film showing as a tool to attract their customers. According to the dealer, previously they used to provide high tea as incentive during the meetings. Now lunch/dinner is also served.

Monsanto’s incentive packages vary from season to season. A highly sought after award is providing gold medals if dealers achieve target sales. Ex-sales persons from Syngenta also described such incentives, however those were cash rewards and were set at very high level of sale targets. The ex-sales person from Syngenta mentioned the maximum push by the company to make rice farmers start using granular pesticide. In Pakistan, this form of pesticide has just been recently introduced and is not well accepted.

Another incentive provided by Monsanto was providing 120 grams of gold; this was provided if dealers were successful in selling 30 tons of seeds. Other incentives include a Haj package, i.e. dealers were provided free tickets to travel to Saudi Arabia and perform Haj. The lesser degree incentives included mainly for landlords were wall clocks and motorcycles.

Apart from individual incentives, Monsanto has also been known to fund schools, or school-based activities in rural areas. These are publicized by the TNC quite openly on its website. All these incentives have one goal in mind and that is increasing profits. The Economic Research Service/USDA has reiterates the mechanism used by TNCs for generating these profits.⁵²

“Hybrid corn varieties ...widely accepted by farmers, provided the private sector a natural method of protecting plant breeding investments – saved hybrid corn seed produces substantially lower yields, encouraging farmers to repurchase seed every year. This development, combined with a strengthening of legal protection of intellectual property rights ...brought large scale change to the seed industry, particularly increases in R&D and industry concentration.”

The concentration in the seed industry is indeed immense and creates immense blocks in holding the corporate sector accountable. The case of tracing the ICI seed in Pakistan is one example of corporate mergers and acquisitions which make it difficult to trace the actual ownership of TNC’s hybrid seeds.

According to discussions with government agricultural departments, the most commonly seed used in the Badin and Hyderabad district was ICI. Focus group discussions held by Roots for Equity team verified these statements.

ICI, Pakistan claims on its web site:⁵³

“Seeds Division is one of the leading providers of Hybrid Seeds in the country. Initiated in 1991, in a short span of time the Division has emerged as a market leader in both the hybrid sunflower and fodder segments and has depicted steady growth in the maize segment. The Division has established a wide dealer network, which caters to the requirements of the farmers. It acquires its products from Pacific Seeds, an Australian seeds company that is a part of the Advanta group.”



It is important to note that ICI is using the term “provider” which is very true. As ICI itself claims that Pacific Seeds is part of Advanta. Pacific Seeds has passed through many hands, including Zeneca Seeds which is currently owned by Advanta Seed Group, a

major seed corporation. However, Advanta, based on the information provided on its web site, is not an independent corporation in itself, being owned by Fox Paine,⁵⁴ a United States equity business (**Figure 1**).

The rapid change in the seed industry shows the volatile situation present with respect to seed ownership and its importance to the global capitalist enterprises in using seed as a commodity for earning super profits. The ownership of sunflower seeds distributed in Pakistan by ICI depicts the challenge of actually holding any one firm accountable for its operations in any country.

Conclusion

This research focused on the impact of agro-chemical transnational corporations on women. The data provides concrete evidence of the violence inflicted by the neoliberal policies on the poorest and most vulnerable segment of our communities namely women and children.

In this age of corporate globalization, the intricate, complex connections of the elite sector of our economy with that of the international global market result in the development and implementation of policies generating vast profits for them, all of which is actually amassed by the exploitation of workers, whether they be urban or rural.

In the case of women, their exploitation and oppression has not been reduced; in fact the intensity of the exploitation and oppression has increased. Women even during pregnancy had to labor doubly for themselves, their born and unborn children, as was illustrated both through the case study and the experience of a woman who had come to join in the rice harvest. They, no matter what their personal condition of physical or emotional pain, had to keep on working to provide for their families and themselves.

There is no doubt that the basic formula of control over natural resources such as land, water, seeds by transnational corporations can only result in the misery of farmers and farm labor. This is the crux of the problem, and hence can only be rectified by the total rejection of neoliberal policies being spouted by capitalist forces.

Endnotes

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- ⁴ *The Daily Dawn*, February 14, 2005. WB orders probe into violations of guidelines: LBOD, NDP implementation
- ⁵ *The News*, 29 September, 2004, p.9. Sunflower production records 356pc rise.
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- ¹⁰ Khan, Mahmood Hasan. Agricultural development and changes in the land tenure and land revenue systems in Pakistan” in “Fifty years of Pakistan’s economy: traditional topics and contemporary concerns.” Khan, Shahrukh Rafi (Ed). Oxford University Press, 2000, p. 120.
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- ¹² Raza, Rafi (ed). Pakistan in perspective:1947-1997, Karachi, Oxford University Press, 1997, p. 178.
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- ¹⁵ *Ibid*, Table 4-2, p. 62.
- ¹⁶ *Ibid*, p. 156.
- ¹⁷ Hasan, Pervez. Pakistan’s economy at the crossroads: past policies and present imperatives. Oxford University Press, p. 54.
- ¹⁸ *Ibid*, p. 130.
- ¹⁹ Shahid-ur-Rehman. Who owns Pakistan? Fluctuating fortunes of business mughals. Mr Books (Pvt) Ltd, 1998, p. 57.
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- ²³ Hasan, Pervez. Pakistan’s economy at the crossroads, p. 271-272.
- ²⁴ Khan, Mahmood Hasan. Agricultural development and changes in the land tenure and land revenue systems in Pakistan”, p. 120.
- ²⁵ Shahid-ur-Rehman. Who owns Pakistan?, p. 29.
- ²⁶ *Ibid*, p. 33.
- ²⁷ *Ibid*, p. 34.
- ²⁸ http://www.pakboi.gov.pk/Success_Stories/mnc_s_views_of_business_enviro.html
- ²⁹ <http://www.pakistanlink.com/headlines/march04/01/08.html>
- ³⁰ Courtesy Daily Business Recorder, August 18, 2004; <http://www.pakissan.com/english/news/newsDetail>.
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- ³⁶ *Ibid*, p. 4.
- ³⁷ *Ibid*, p. 3.
- ³⁸ *Ibid*, p. 7
- ³⁹ There are two principal crop seasons: the “Khariif” season, which runs from April-June through October-December, and the “Rabi”

season, which runs from October-December through April-May.

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^{*} It is worth pointing out that a national company, Rainbow is said to have disappeared from the market. The seed distributed by it was found to have no seed at all on flowering.

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⁵⁰ PARC E. News, December, 2002, Vol. 22, No. 12; *Spring sunflower sowing talk*.

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