Pak. J. Agri. Sci., Vol. 31, *No.* 3, 1994

SOCIOECONOMIC EFFECf OF .INDUSTRIALIZATION ON THE SURROUNDING RURAL AREAS WITH SPECIAL REFERENCE TO AGRICULTURE: A CASE STUDY OF ISLAMAHAD DISTRICT

Khurshid AIi Quraishi, Buland Akhtar, Ch. Muhammad Aslam,
Malik Ikram AIi & Asghar AIi Khan
University of Agriculture, Faisalabad

The study represents an in-depth assessment of socioeconomic impacts of industrialization of Islamabad district on the surrounding areas in three concentric zones. Results of the study have clearly revealed that industrialization did not only open up additional employment avenues resulting in increased household incomes but also induced significant socioeconomic and attitudinal changes in the life style of the people of the area. It was found that the distance from the point of industrial activity was an important factor in determining the extent of impact on communities of the rural areas. It was observed to be greater and widespread up to 8 km radius compared with 8-16 km and beyond 16 km, where it steadily declined.

INTRODUCTION

Agriculture and industry are not mutually exclusive. Industrial sector depends on agriculture as a major source for meeting its raw material needs. The industrial sector, in turn, absorbs the surplus labour of the agriculture sector and thus provides a cushioning effect by opening up new employment avenues for an overwhelming majority engaged in agriculture, Simultaneously, the industrial sector also creates industrial demand for different agricultural raw materials and thus indirectly affects cropping pattern. Besides, industrialization also brings certain physical and institutional changes which have significant impact on the beneficent community.

Pakistan has a vast agriculture sector scattered over an area of 33.38 million ha of cultivable land in 45940 villages with population of over 60 million. Pakistan is also gifted with sufficient potential mineral and power resources. This, therefore, essentially suggests a balanced growth of both these sectors. Unfortunately, however, we have not had a symbiotic relationship between the growth of both sectors due mainly to our heavily biased economic policies and an instable political system for decades.

During the process of industrialization in the country, an industrial area was established in Islamabadconsisting of various units of ghee mills, flour mills, chemicals, food and marble factories, etc. in which almost 20,000 labour force is presently employed. Overtime this industrial activity has had significant impacts on the economy of surrounding rural areas vis-a-vis social and cultural impacts reflected through changes in farming practices, occupation of people, decline of pressure on land, employment for hitherto unemployed, shift of population from rural to urban area, physical andinstitutional changes, etc. The present study explored a relative scenario of the changes brought about by industrialization.

MATERIALS AND METHODS

For the assessment of the true effects of industrialization, the area of investigation was divided into three concentric zones viz. 0-8 km, 8-16 km and beyond 16 km of the industrial area. These were respectively named as the first, the second and the third zone. Of the total 133 villages of Islamabad district, 14 villages in all i.e. 2 out of 11 villages from the first zone, 4 out of 40 from the second and 8 out of 72 from the third zone were sampled randomly. For further detailed study of the selected villages a preliminary survey of these villages was first conducted regarding the size of holding and tenurial pattern obtaining in the area.

In view of the observed variation in farm size, 5 class intervals viz. 0-5, 5-10, 10-IS, 15-20 and above 20 acres were carved out. Three cases were drawn out from each size group in each land tenure system randomly and thus a total of 135 cases were studied. Besides, 10 key informants including village headmen, member, local bodies, zakat and ushar committee, school teachers from village were also interviewed' about physical and institutional changes.

RESULTS AND DISCUSSION

Shift in population: Evidence gathered from this enquiry emphatically concluded that population pressure on land in rural Islamabad was steadily decreasing due to shift of landless agricultural labour, tenants, small and large land holders and others towards urban suburbs. This shift also exhibited some important physical and institutional changes.

Table 1. Complete shift of population from rural to urban area

Zone	Category to which they belonged'	Number of families shifted	Percentage	Reason of shift
I	Non-agricultural occupation	5	6	Job opportunities/
11	- do-	8	10	Coercion in village
III	- do-	25	11	- do-
I	Landless agricultural labour	4	6	Work opportunities
11	- do-	6	10	- do-
III	- do-	35	14	- do-
I	Tenant	1	7	Work opportunities
11	- do-	2	13	- do-
III	- do-	5	33	- do-
I	Small land holders	3	15	Work opportunities/
11	- do-	3	15	Business charm
III	- do-	5	25	Children education/
I	Large land holders	1	10	Business charm
11	- do-	2	20	Children education/
III	- do-	4	40	Better facilities

As for the complete shift of people belonging to agricultural and non-agricul-

tural occupations, it was found to be greater in the first zone as compared to the other two zones. This trend may be attributed tQ \ne pu11 factor on account of relative nearness to the industrial center. The reasons of shift were found to be work opportunities, coercion j» yjJJ.3gc .3DQ bellcr civrc amemCJcs. Details are given in Table 1.

Extent of commuters: Concurrent subdivision and fragmentation of farm holdings due to population pressure have had adverse effects on agricultural productivity and capita-1 incomes in the rural areas. Expected better prospects of higher income compelled the rural population to move close to the city to work in the industrial concerns.

Table 2. Extent of commuters

Zone	Category to which they belonged	Number of families shifted	Percentage	Reason of shift
I	Non-agricuhural occupation	5	Engaged in	50-6Mb
II	- do-	8	mills and	60-75%
III	- do-	25	factories	50-80%
I	Landless agricultural labour	4	- do-	1(XJfYr) in off season
II	- do-	6	- do-	- do-
III	- do-	35	- do-	- do-
I	Tenant	1	- do-	50%
II	- do-	2	- do-	50%
III	- do-	5	- do-	50-60%
I	Small land holders	3	- do-	30-40%
II	- do-	3	- do-	40%
III	- do-	Nil	Nil	Nil
I	Large land holders	Nil	Nil	Nil
II	- do-	Nil	Nil	Nil
III	- do-	Nil	Nil	Nil

As will be seen from the Table 3, the number of commuters was more in the first zone than in the second and the third zones which is ascribed to the factor of relative nearness to the town. Estimated increase in their supplemented income ranged from 30-80%.

Shift in cropping pattern: Cropping pattern '&'~.;WCl'd\\'j 'is an 'Important indicator of the extent of progress in farming and the level of farm income. After the emergence of new city and industrial ccnJer, ¡coD..r;dcroblc changes occurred in the farming business. It was found that farms falling within the radius of 0-8 km changed their cropping pattern by 100% and had started growing vegetables resulting in higher incomes due to increased area under irrigation and very high cropping intensity. This change in cropping pattern in the third zone (above 16 km) was relatively too small as compared to the first and second Zone because of its greater distance from the hub of industrial activity. This signifies that the farmers of the first zone had become more rational in their resource allocation and consequently had increased their gross and net returns.

Table 3. Nature of dwelling, streets and drainage

Zone	Total houses	Kacha houses	Pucca houses	Modern houses	Length of pucca street (average km)	Length of pucca drains (feet)
I	1412	45	1367	505	2,5	65
II	572	98	474	112	1,125	23
III	2848	293	2314	434	0.75	11,25

Physical changes: The pattern of settlements of rural people, the resource base, the type and spatial arrangement of houses, supplies and services constitute basic elements of the societal set up. With a view to capture the nature of pattern of settlement and basic amenities and developments, data were collected on nature of houses, drainage and length of pucca streets and arc presented in Table 3.

Viewed from the standpoint of construction materials, there were three principal categories of houses i.e. kacha, pucca and modern houses. The study revealed that there was one modern house for 12 persons in the first zone as against the 28 and 88 persons in the second and the third zones, respectively. It may be argued that people in the nearer zone had become economically better off and had thus carried relatively greater impact of industrialization. Position with regard to pucca drains and streets constructed in the village abadies were found to be comparatively better in the first zone as compared to the farthest zone which clearly reflects the improvement in infrastructure caused by industrialization.

Change in literacy status: Literacy rates obtainable in rural areas of Pakistan are extremely low and it, in fact, constitutes an important barrier towards the introduction of new ideas and rural welfare.

It is evident from the Table 4 that literacy percentage in the first Zone was 29.33% as against 23.68% in the second and 17.128% in the third zone. The percentage of literacy in the third Zone was obviously far below the first zone which indicated the clear-cut impact of industrialization.

Table 4. Level of education in the three zones

Zone	Graduate	Inter	Matric	Primary	Tolal *(%J)*	Population
I	1.06	3,37	4,16	19.73	29.33	6100
II	1.08	3.38	3.64	15,52	23.68	3130
III	0.44	1,448	2.48	13,20	17.128	17062

It may safely be concluded that distance of villages from the industrial area is an important factor in determining the extent of rural-urban drift, extent of commuters, shift in cropping pattern, physical and institutional changes. It was found that the villages of the first zone were comparatively better recipient of a positive change as compared to the farther zones. Industrial-

ization of the rural environment is thus the key to the social and economic progress of Pakistan.

REFERENCES

Akram, M. 1962. Socioeconomic effect of industrialization of Lyallpur town on the surrounding rural areas with special reference to agriculture. M.Sc. Thesis, West Pak. Agri. Univ., Lyallpur.

Census Organization. 1981. Population census of district Islamabad. Census Org., Interior Div., Islamabad.

Junghans, K.H. 1986. Industrialization as development indicator in over-populated agricultural areas of south and southeast Asia. Land Agrawirtschaft-un-Geselllschaft, 493-562.

Kang, S. 1991. Factors affecting rural income and employment. Improving quality of life in rural areas in Asia and Pacific: Policies and Programmes. Report of APO study meeting, Seoul, Republic of Korea. pp: 61-88.

Pethiya, B.P. 1992. Technology for rural industrialization. J. Rural Dev., Hyderabad, 279-288.