



Ss. No. 9

*Editor* : A. S. KHALID  
*Joint Editors* : HAMID DAR  
MUHAMMAD NAWAZ

---

GOVERNMENT COLLEGE  
**ECONOMIC JOURNAL**

Is produced half yearly during January—June and July—December by the Department of Economics, Government College, Lahore. The views expressed are the personal responsibility of the authors and the Department accepts no responsibility for them. Correspondence relating to contributions should be addressed to the Editor and that relating to business matters to the Manager. Contributors should give prior notice in case reprints are required.

**Subscription Rate**  
(For 2 Issues)

Pakistan : Rs. 20.00  
Foreign : \$ 5.00

---

Composed by : Hafeez and Brothers  
Published by : Mr. Zaheer-ud-Din Malik, Manager, Economic Journal, Government College, Lahore.  
Printed by : University Tutorial Printing Press, Albak Road, Anarkali, Lahore.

# Some Socio-Economic variables affecting Birth Rate with Special Reference to Female Education in Pakistan\*

By Mrs. A.R. Chaudhary\*\*

This Paper has been divided into three parts. In Part I, the correlation between fertility rates and some important socio economic variables has been established on a world wide perspective. Part II, deals with need and existing facilities regarding female education in Pakistan. In Part III, an attempt has been made to find some correlation between female education and fertility rates in Pakistan.

## PART I

It is generally agreed upon by economists, sociologists and social scientists that (within the limits established by Physiological factors) a multiplicity of social, economic and cultural factors are the ultimate determinants of birth rates. A vivid dichotomy of current fertility levels observed between economically developed and developing countries proves this. On the average, fertility is about twice as high in the developing as in the more developed regions of the world.<sup>1</sup> The social and economic factors mainly held responsible for decline in fertility are rising levels of living, increased cost of up-bringing children ; higher levels of income, education, urbanization, industrialization, etc. It must be stressed, however, that out of the whole complex of interacting factors mentioned above, it is very difficult to quantify the influence of each one of them individually. It requires concentrated research work to isolate the influence of each one of these variables.

A research study was conducted by Irma Adelman,<sup>2</sup> in which age-specific birth rates in various countries of the world (The sample

---

\*This is a revised version of a paper presented at Tenth Seminar on Research in Population Planning organized by Population Planning Council of Pakistan and National Research Institute of Fertility Control ; held at Karachi from 6th to 8th May, 1976.

\*\*Assistant Professor, Economics Department, Punjab University.

1. United Nations *The Determinants and Consequences of Population Trends*. Volume I, New York 1973.
2. Irma Adelman *An Econometric Analysis of Population Growth*. American Economic Review 53; June 1963 pp 314-339 American Economic Association Evanston, Illinois.

consisted of 37 countries whose annual per capita incomes ranged from \$ 125 to \$ 1900) were correlated with several economic and socio-cultural variables such as urbanization, industrialization and education over the long run. The validity of this cross country approach was tested by computing separate regression equations - one for developed and other for the under-developed countries. No statistically significant differences in regression coefficients emerged, which indicated that the basic postulate of the cross section technique i.e. homogeneity of population response was satisfied. Regarding the influence ;

“Effects of economic conditions upon birth rates at least in the short run have been observed by demographers- For example, Yule found a weak-lagged positive correlation between the course of the business cycle in Great-Britain during the 2nd half of the 19th Century, and the deviation of the birth rates from their secular trend. Similar results were obtained by Ogburn and Thomas for the United States for 1870-1920. For the years 1920-41, Kirk and Nortman working with percentage deviations from the trend, found a correlation coefficient of +.77 between births per 1000 woman of child bearing age and real per capita income. These results were confirmed by Galbraith and Thomas and more recently by Becker.”<sup>3</sup>

This study also showed that the mother's level of education exerts significant influence upon child bearing behaviour. Her analysis showed that a clear inverse correlation between the number of years of schooling of the wife and family size was well established from cross-sectional studies.<sup>4</sup> Since there existed no international data on educational index for female population alone, hence Irma Adelman's study relied on educational index for the overall population and the well known negative correlation of birth rates with the level of education became apparent. The regression coefficient of birth rates, with respect to the educational index was found negative and statistically significant. Quantitatively, among all the variables, a one percent change in the index of education, appeared to exert the largest absolute influence upon age-specific birth rates.

Similarly, Friedlander and Silver<sup>5</sup> using regression analysis of data from 85 countries at different levels of development, found an

3. Ibid Page 316

4. Ibid Page 317

5. Friedlander, Stanley, L and Morris Silver. *A quantitative Study of Determinants of Fertility Behaviour*. Demography. 4:1 pages 32-61. Population Association of America Washington, D.O.

inverse relationship between the birth rates and level of education. Cain and Weininger<sup>6</sup> applied multiple regression analysis to U.S. census data for 1940 and 1960 and found a significant negative relationship between education and fertility. Most of the recent research studies conclude that female education reduces fertility even more than male education e.g. Freedman, Coombs and Chang<sup>7</sup> used 1965, 1967, 1970, KAP (Knowledge, Attitudes and Practice of Family Planning) surveys in Taiwan and found a negative correlation between wife's education and the mean number of children ever born. Many other research studies conducted on U.A.R., Thailand, Taiwan, Greece U.S., Turkey and a number of other countries<sup>8</sup> depict that husband's education has a weaker influence than wife's.

A number of studies have been conducted in India to test the validity of the proposition that a high level of formal female education is associated with low fertility.

In Bangalore, Chandrasekharan<sup>9</sup> found completed size of family for unbroken marriages upto the age of 45 to be 6 or higher for illiterate, primary school and middle school women, 5 for women with a high school education, and 2 for women with college or University education.

The Mysore study<sup>10</sup> revealed that the average number of children born to families of age 15 and above in Bangalore City who were either illiterate or could barely read and write or those who were educated upto middle school, were very nearly the same that is between 5.3 and 5.5 children. However, women who were educated up to high school

- 
6. Cain, Glen G. and Adriana Weininger 1973 *Economic Departments of Fertility Results from Cross-Sectional Aggregate Data Demography* 10.2, page 205-223. Population Association of America Washington D.C.
  7. Freedman Ronald : L Coombs and M.C. Chang *Trends in Family Size, Preferences and Practice of Family Planning Taiwan, 1965-70*. Studies in Family Planning 3 : 12, page 281-296. The Population Council, New York City.
  8. An ICP Staff Report *The Policy Relevance of Recent Social Research on Fertility*, occasional Monograph series No. 2. Smithsonian Institution Washington, D.C. Sep. 1974.
  9. C. Chandra Sekharan : *Economic and Social Factors Affecting Fertility in Mysore State*. A paper presented to the Annual Meeting of the Population Association of America. May 1964, as cited in Coale & Hoover, op. cit. page 48.
  10. United Nations and Government of India. *The Mysore Population Study* as cited in Agarwala op. cit. page 126.

or more gave birth to only 3.9 children. Part of the difference was due to higher marriage age of those who were educated upto high school or more. But when the averages were standardised by duration and age of marriage, the difference between the two groups persisted, though it was smaller. Similar results were found in the sixteenth round of the National Sample Survey of India carried out in 1960-61. The number of children born alive to the women of completed maternity who were either illiterate or educated below primary level or upto primary was 6.6. But this number was 5.00, 4.6 and 2.0 respectively for those who were educated upto middle, matriculation, and university standards. This clearly indicates that differential fertility by education level does exist in India, but only when females are educated upto matriculation level or more. The following table<sup>11</sup> summarizes some other studies conducted in India.

**TABLE I**  
**Average number of Children born Alive to Couples Classified by**  
**Educational level of Husband and Wife**

Mukerjee				Driver	
Wife		Husband		Husband	
Illiterate	3.5	Illiterate	3.5	Illiterate	4.7
Primary	3.4	Primary	3.3	Primary	4.3
Secondary	3.1	Secondary	3.2	Above Primary	3.4
Technical	3.0	Technical	3.2	Total	4.5
College	3.0	College	3.4	High School Matriculation.	3.9
Post- Graduate	2.5	Post- Graduate	3.3	College	3.9
Private	3.7	Private	4.0	Total	4.5

Sources : (1) Mukerjee, R.K., *Social Profiles of a Metropolis Bombay*; Asia Publishing House, 1961. pp 163-164.

(2) Driver, E.D. *Differential Fertility in Central India*, Princeton: Princeton University Press, 1963, pp. 99-101.

11. Agarwala, S.N. *India's Population Problems*. New Delhi Tata McGraw-Hill Pub. Co. Ltd. 1972 page 128.

## PART II

1975 was declared as 'International Women Year' by the U.N. and most of the less developed countries including Pakistan have also celebrated this year. Seminars, lectures and discussions have taken place regarding major issues confronted by the "Less Developed Half" of the population. One major impediment barring women's full participation in economic field has been lack of formal, vocational and technical education. Apart from economic advantages of an educated Women Power, the problem of illiteracy is a human right's issue. Considering that 75% of the entire Pakistan's female population reside in rural areas, with little or no facility for formal education, this problem assumes a serious character.

There has been no research studies high lighting the differences in educational facilities among rural and urban women, or among women belonging to different Provinces in Pakistan. Similarly, no concrete research has been conducted on the occupational distribution of Pakistani women which would serve as an indicator of the educational facilities available to them.

In most of the existing literature on education and employment patterns in Pakistan<sup>12</sup> sexwise distribution is either totally ignored or has been given in such a way that meaningful conclusions can not be drawn. In the opinion of the author, problems of female population deserve special attention. General indicators of economic development like educational facilities, consumption of newspapers, existence and use of public libraries etc., all pertain to overall population and do not give an idea as to the percentage of women making use of these facilities.

It is an accepted fact that education is correlated with socio-economic development. Availability and distribution of educational facilities are measures of development;

"The relationship between skills and education, skills and capital and between the three and economic productivity is postulated by many educational economists to such an extent that technical coefficients are sought to be derived as determinents of optimal educational quantum."<sup>13</sup>

- 
12. Obaudhary, A.R. *Role of Women in Economic Development ; A Case Study of Pakistan*. Economic Journal 8 (2) Winter 1975, pages 107-122. Government College, Lahore publication
  13. Ahmad Manzoor *The Economics of Nonformal Education Resources, Costs and Benefits*. New York Praeger Publishers, 1975, page 122.

A look at the history of female education in this sub-continent reveals that views on female education have been mixed. Some scholars have stressed the need of a "special type of education" for women. Basic knowledge of household accounts, first aid, personal and family hygiene, home management, cookery and nutrition has been generally agreed upon as pre-requisites of successful motherhood and so education in these fields has been accepted.<sup>14</sup> Most of the scholars have been sceptical of the contribution of women regarding higher education in the field of basic and physical sciences, Economics, Mathematics etc. Opposite views especially on the adverse effects on employment situation of women's entrance in the labour market have often been expressed.<sup>15</sup>

#### EXISTING FACILITIES REGARDING FORMAL FEMALE EDUCATION

A look at the following table reveals that facilities regarding formal female education are extremely meagre in comparison to that available to males :

TABLE II

Educational Institutions at different levels.	Female Institutions as percentage of total Institutions.	Female Enrolment as percentage of the total enrolment.	Female teachers as percentage of total teachers.
1. Primary School	31%	29.8%	29%
2. Middle School	26.9%	21.7%	27%
2. High Schools	30.1%	20%	28%
4. Secondary/ Vocational Institutions.	39%	35%	24%
5. Arts & Sc. College.	24%	30.7%	28%
6. Professional College	10%	16%	11%
7. Universities	There is no separate university for females.	19.6%	10%

Source : Calculated by the author on the basis of information contained in, "Educational Statistics of Pakistan 1947-48 to 1972-73" published by Bureau of Educational Planning and Management and Central Bureau of Education, Ministry of Education Islamabad and Pakistan Economic Survey 1975-76

- 
14. Dargupta, Jyotiprova *Girls Education in India: In the Secondary and Collegiate Stages*. Calcutta University Press 1938, p. 269.
15. Sullerot, Evelyne *Women Society and Change*. London, Weedenfold and Nicolson, 1971.



Number of female doctors available is estimated at 5000 which is nearly 1/3 of the total doctors in Pakistan.<sup>16</sup> Similarly, the number of trained female nurses is about 6144, that of health visitors 1636, qualified midwives 2700 and qualified family planning visitors 500 approximately which is extremely low as compared with the requirements of the country.<sup>17</sup>

There is very little female participation in other highly technical professional and top administrative jobs e.g. there are only eight female Chartered Accountants out of a total of 760 Chartered Accountants registered with the Institute of Chartered Accountants, Pakistan, which comes to even less than 1% of the total.<sup>18</sup>

### PART III

#### CORRELATION BETWEEN FEMALE EDUCATION AND FERTILITY RATES IN PAKISTAN

In Pakistan, no concrete research has been conducted to find out the impact of female education on fertility rates. Lack of statistical data inhibits the inference of meaningful conclusions. Some studies have been conducted at Micro level ;

One such study<sup>19</sup> conducted on a sample of 100 women revealed some interesting facts such as :—

1. The oriental type of fatalistic attitude was missing. Most of the women covered in this sample wanted an improvement in their standard of living.

2. There existed relationship between house-wife's education and the money spent on children's education as shown below :

16. This information has been obtained from the Pakistani Medical Association Centre, Karachi.

17. Government of Pakistan Finance Division, *Pakistan Economic Survey 1975-76*.

18. Institute of Chartered Accountants of Pakistan. *Members Hand Book*, 1975. Karachi.

19. Sikandar Khan, *Housewife's Education and the Number of Children in the family as the Factor Affecting the Levels of Living*. Thesis presented to the Sociology Department, Punjab University, 1960.

TABLE III

RELATION BETWEEN HOUSEWIFE'S EDUCATION AND  
THE MONEY SPENT ON CHILDREN'S EDUCATION

Education expenditure on children (monthly)	Education			Total
	Not Low	Low	None	
Rs. 110-159 or more	3	4	6	13
Rs. 60-109	3	7	11	21
Rs. upto 59	12	27	8	47
Total :	18	38	25	81*

$X^2=10.14$  D.F.=2 P=less than .05 T=0.29

\*Six families did not have children and 12 families did not have education expenditure.

$X^2$  value allows us to reject null hypothesis and to accept alternative one. The degree of association is rather medium.

(Source : Sikandar Khan op. cit. page 40)

3. Housewife's education is related to standard of living of the family as shown by money spent on food.

TABLE IV

RELATION BETWEEN EDUCATION AND THE LIVING AS  
INDICATED BY THE FOOD EXPENDITURE OF THE  
FAMILIES

Level of living Money spent on food Rs.	Education			Total
	Not low	Low	None	
400 or above	7	8	9	24
300 - 399	10	7	10	37
0 - 292	9	30	9	48
Total ;	26	45	28	99

$X^2=12.48$  P is less than .05 D.F.=4 T=.25

$X^2$  value allows us to reject null hypothesis and to accept the alternative hypothesis. The relation is rather medium. Direction of relation is positive.

(Source : Sikandar Khan, op. cit. page 40.)

From the foregoing analysis, it is apparent that a massive programme of female education in Pakistan will drastically reduce the birth rates. Educated women are progressive and keen to improve their standard of living so they can easily be convinced about the small family norm.

Another study was<sup>20</sup> conducted on a sample of 138 people out of a universe of 332 to find out the correlation of fertility with some indicators of economic status. Out of a number of hypothesis, the hypothesis that higher the education of respondents, the lower the fertility, was proved to be true.

TABLE V

THE ASSOCIATION OF RESPONDENT'S FERTILITY AND FORMAL EDUCATION

Respondents education	Fertility			Total
	.0—28	.3—38	.4—89	
Graduate and above	10	7	2	19
Matriculation and below Graduate.	21	20	31	72
Middle and below Matriculation & Primary	11	3	5	19
Total	42	30	38	110

D.F. = 4     $X^2 = 10.89$

The value of  $X^2$  at five per cent level of significance and four degrees of freedom is 9.488. As the calculated value of  $X^2$  is more than the tabulated value, the hypothesis of relationship is accepted and that of no relationship is rejected.

(Source : Ansari op. cit. page 81)

Thus, education of the respondents was related inversely with their fertility i.e. the higher the education of the respondents, the lower the fertility. Other relevant inferences of this study were :

1. There existed no inverse or direct relationship between the income of the respondents and their fertility.
2. There existed no inverse or direct relationship between the occupational designation of the respondents and their fertility.

20. Nasim Ahmad Ansari, *Fertility in relation to some of the Important Factors Contributing to Socio-Economic Status of Postal Employees*. Thesis presented to Department of Sociology, Punjab University 1962.

Another study was conducted in Lahore by the Social Sciences Research Centre, University of the Punjab, in 1960-61. Data covering 2331 married women was analysed in connection with correlation between fertility and some indicators of economic status. Here also, education of the wife emerged as the only variable having significant inverse relationship with fertility.

Total fertility rates obtained for women with low (less than Matric) medium (Matric & Intermediate) and high education (Degree and above) varied from 8.87 for the base group to 6.95 for the middle, and 3.65 for the high education group. But the number of women in the medium and particularly the high education category (78 and 17 respectively) was not large enough to enable us to arrive at any definite conclusions concerning this relationship.<sup>21</sup>

The studies mentioned above have obvious limitations e.g. small size of sample at higher levels of education and lack of application of sophisticated statistical techniques etc. A number of such other micro-studies<sup>22</sup>, however, enable us to conclude that levels and extent of female education does exert significant influence on fertility rates in Pakistan, as elsewhere in the world. It is very essential that female education facilities be expanded, both at secondary and higher levels to make population planning activities effective.

#### CONCLUSIONS :

1. Out of many social and economic variables effecting birthrates, education appears as the most important single variable. Hence, policy makers and planners should concentrate on increasing educational facilities for females especially at the higher level.
2. There is significant correlation between female education and fertility rates in developed as well as less developed countries of the world.
3. On the basis of some micro studies conducted in Pakistan, it has been found that a negative correlation exists between level of female education and fertility rates.
4. Existing female educational facilities are extremely inadequate and there is vital need for their expansion especially at higher levels.

---

21. Akhtar, Jamila, "*Differential Fertility*" *Pakistan Sociological Studies*. The Pakistan Sociological Association, University of the Punjab, Lahore 1965, p. 32-40.

22. Research Reports submitted to the Social Sciences Research Centre and Department of Sociology, University of the Punjab.

5. Greater facilities for female education at the higher level, implies specialized training and skills. There is empirical evidence to show that highly skilled and professionally qualified women tend to continue work even after marriage.<sup>23</sup> Hence, the tendency of birth rates to decline will accentuate.

6. Population explosion in Pakistan is not the problem of official and executives charged with this responsibility solely but all economic, social and educational policies should be geared to achieve this end.

7. Female education and its impact on fertility rates is a virgin area of research. Researchers in Pakistan should concentrate on calculation of costs of a programme of universal female education upto middle, matric and B.A. level. Similarly, research studies can be conducted to find out the costs involved in expanding technical and professional facilities for women and the likely benefits accruing to society in the form of reduction in fertility rates. Such studies can enlighten economic planners who might be thinking of investment in education only from a social welfare point of view. Economic benefits, in the form of averted births may enable such planners to reformulate investment priorities especially in the case of females; expanding training facilities for them is considered an economic wastage in our country.

---

23. Sullerot, Evelyne Op. cit. pages 189, 199.

## BIBLIOGRAPHY

1. Coale, Analey and Edgar M. Hoover. *Population Growth and Economic Development in low income countries; A Case Study of India's prospects.* New Jersey, Princeton University Press 1958 389 p.
2. Hauser Philip M. Ed. *The Population dilemma.* Englewood cliffs, N.J. Prentice Hall 1963 p. 187.
3. Parry, H.B. Ed. *Population and its Problems: A plain man's guide.* Oxford, Clarendon Press, 1974, p. 422.
4. Smith, T.E. Ed. *The Politics of Family Planning in the Third World.* London, George Allen and Unwin Ltd. 1973 p. 352.
5. Thomlinson, Ralph *Population Dynamics Causes and Consequences of World Demographic Change.* New York, Random House 1965.
6. Freedman, Ronald *The Population of the World Series 1-19 U.S.A.* 1964.

## RANDOM REFLECTIONS ON PLANNING IN PAKISTAN

*Riffat Nasreen\**

The concept of a mixed economy is so widely applicable that it can be subdivided into different kinds of mixed economies. In an operational sense, one can easily distinguish between two different types of mixed economies. The first can be termed as a market-oriented mixed economy and the second a planned mixed economy. There is a great deal of difference in the working of these two types of economies, especially as regards the role played in it by the public sector.

In a market-oriented mixed economy the decision as what is to be produced, or the bundle of consumer and capital goods that will enter the market, will be in response to market signals. These signals will reflect the demand pattern as thrown up by the prevailing income distribution in the economy. For instance if income is primarily in the hands of the richer classes then the goods produced will be mostly luxury and semi-luxury goods. In such economies the state-owned industries will also work within the market framework and their basic role will not differ much from that in the private sector.

All welfare programmes like unemployment benefits, free health facilities and free education are basically outside the framework of the production process. No attempt is made to plan in such an economy as the government does not and cannot control its direction.

The other kind of mixed economy is a planned mixed economy. Although there exist both private and public sectors in a planned mixed economy, the basic decision as to what is to be produced is made by the planning authorities and the economy is then geared to the production of these goods. The government therefore decides as to how the national product is to be divided between capital and consumer goods. In such an economy whereas the price mechanism is still used, it functions as an indicator of efficiency of production rather than

---

\*The author is a post-graduate student in the Department of Economics, Government College, Lahore.

that of determining supply patterns. The economies of socialist countries are the best examples of a planned mixed economy with a division of ownership of the means of production between the public and the private sectors differing according to the stage of socialism they have reached.

Pakistan has a market-oriented mixed economy. Pakistan has had an overdose of planning and the planners have enjoyed considerable autonomy of action in the past. Planning in Pakistan has not been confined to the distribution of certain scarce resources to different sectors, regions and economic groups. The feasibility of different development projects has been determined in terms of availability of these aggregate resources. Very little, if any, attention has been paid in the past to the distribution of gains of economic growth to various income groups. The object of maximisation of the growth rate tended to blind the planners and the policy-makers of the past to the problem of an equitable distribution of the gains from economic growth, or the other desirable economic objectives such as providing employment opportunities and adequate health and education facilities.

However, two things need to be kept in view in the objective assessment of the past experience in the field of development planning. Firstly, planners were not completely autonomous in the choice of planning objectives and strategy. For example, during this 'decade of development', which corresponds to the Second and Third Five-Year Plan periods, the choice of objectives was to a large extent influenced by the massive inflow of foreign aid and the political situation in the country. Secondly, it should be recognized that the unsuitability of a particular model accepted by the planners will make them search for more appropriate models. As every model-builder knows a model only works when the assumptions it incorporates are correct. The crux of the problem of economic planning in Pakistan is that income distribution is heavily skewed in favour of a small percentage of population while the vast majority lives at the subsistence level. If the supply pattern is to be determined by the market forces the emphasis in production will go towards luxury and semi-luxury goods and the basic needs of the people will continue to be ignored. Even the state-controlled industries will start producing for the richer sections of the community and hence negate the very purpose of their creation.

The main reason for the failure of previous plans in Pakistan was that there was never any real control on either the pattern of invest-



ment or the kinds of goods to be produced. This was most clearly seen in the Third Five-Year Plan which emphasized the need for capital goods industries and ended up with hardly any marked success at all with investment once again flowing into consumer goods industries.

Now if the government wishes to ensure the achievement of its basic objective, i.e., the removal of poverty, it would have to resort to a planned mixed economy rather than a market-oriented mixed economy. The poverty can be eliminated through economic planning if.

1. The planners concentrate on planning the supply of essential commodities along, with housing, health and education facilities, the basic need of the poorer sections of the population.
2. The excess incomes generated into the hands of the richer classes are either channelized into savings or taxed away by the government. Otherwise, excess income will only lead to a demand for luxury goods on a much higher scale. It will also increase the inflationary pressures by pushing up the prices of luxury goods.

The answer to this problem of excess income can only be found in the form of increased taxes especially in the agricultural sector. The success of future planning will depend to a very large extent on the capacity of the government to take away the additional incomes created by the capitalists and the big landlords. In other words, the prevailing tax structure must be changed in order to achieve the desired goal of the removal of poverty.

The public sector should help in the achievement of the other major economic goals i.e., the building of a heavy industrial base in the economy. The emphasis should be on machines that produce machines and imports should be mainly machines and spare parts for the machines that are to be assembled within the country.

The other major problem regarding the public sector is how to finance its growth and enlarge its base, when it suffers from an initial disadvantage of controlling a very small percentage of industrial production. This problem can be solved by:

1. Channelizing public sector investment into essential consumer goods industries especially when the private sector is not coming forward.

2. Changing the terms of trade between the consumer goods industries and the capital goods industries in favour of the latter. In the past these have been biased very much in favour of consumer goods industries which has resulted in exorbitantly high profit rates in these industries.

The problem would be to ensure that higher prices of capital goods result in lower profit margins rather than passed on in the form of higher prices of consumer goods. Price controls in essential consumer goods should be enforced and prices further checked by encouraging competition among producers.

A factor essential for the success of a planned mixed economy is the presence of a planning machinery capable of formulating and implementing the plan. The existing planning institutions in Pakistan are inadequate for undertaking such an important and crucial task. The basic outline of the plan should be prepared by the government after consulting the experts and the people's representatives at all levels. Once the basic needs of the people have been estimated the the planning machinery should then work out the mechanics of how these can be achieved with the resources of the country.

The plan should present in the first stage the alternative growth paths that the economy can take. These should then be discussed by all concerned and the final plan should then be approved by the government.

The basic objective of future economic planning—providing a minimum standard of living to the people, needs to be incorporated in the nation's development plans. In the past, the planners have wrongly hoped that the fruits of development will trickle down to the poorer sections of the population automatically.

The way growth is presently measured, i.e., a percentage increase in total GNP, implies that a unit increase of additional income has the same additional social welfare at all income levels. For a skewed income distribution this implies further that a percentage increase in incomes of the highest income groups has several times larger weight than a percentage increase in incomes of the lowest income groups. The implicit weightage in GNP growth is thus capable of giving an aggregate growth rate which is much larger than the average growth rate of a vast majority of the population. This aggregate growth rate is unrepresentative as an index of increase in social welfare.

When income distribution is uneven or skewed, as in Pakistan, the focus of planning must shift from the aggregate to its components. The problem of poverty affects twenty to thirty million people in the country and this problem must be given the top most priority in future planning. One of the fundamental tasks of the planners will be to provide resources that would progressively reduce the number of people living below a socially acceptable standard of living.

It is dangerous to plan without facts. Statistics serve as the main instrument in the formulation and evaluation of a national economic development plan. The data collecting in Pakistan is outdated. There is a need to create an automated system of collecting, presenting analysing and interpreting the numerical information.

In spite of all the sophistications in the formulation and execution of economic plans, it must be kept in mind that planning techniques and processes are not perfect. The planners can only make guesses-estimated guesses at the best. The best of the guesses are subject or error.

Pakistan's experience in planning for economic development extends over a period of twenty years. The record of progress is mixed. The First Five-Year Plan (1955-60) did not get enough political support. Still it helped in initiating the process of development in the country.

The Second Five-Year Plan (1960-65) was an apparent success in terms of the traditional growth rate criterion, but it left behind a number of problems which are still to be solved. The Third Five-Year Plan (1965-70) was affected by interruption of foreign aid and the war of 1965, and failed to achieve its objectives. The Fourth Five-Year Plan (1970-75) was prepared in a different historical and geographical context. With the breakup of Pakistan, its conceptual framework and major dimensions changed. Therefore, the Fourth Plan was abandoned after 1971.

The impact of economic planning on the whole has been considerable, the development strategy followed upto 1970-71 tended to revolve around the traditional growth indicators of GNP; exports, savings and investment. This planning did not adequately reflect the needs and aspirations of the people and fell short of setting goals of distributive justice.

In December 1971, the country was faced with a political and economic crisis. At the heart of this crisis was the discontentment of the masses with the process of economic development that tended to build up a small privileged class at the expense of the majority. It was reflected in a state of serious tension arising from a lack of regional and social balance in development. This tension had risen to a point where progress even along traditional lines was not possible. Investment had come down to a level where it was not significantly above what was required for replacement of old wornout capital stock. In seeking to overcome this crisis the government used the method of annual plans to introduce policies designed to produce quick and immediate results. Before launching the first annual plan, a series of economic reforms were carried out to change the basic character and structure of the economy.

The interim constitution as well as the permanent constitution adopted in 1973, incorporated basic principles of social justice which would govern economic policy and planning. In the field of development planning the present government adopted a number of policies and development programmes which were highly relevant to the fundamentals of the new socio-economic order. The annual plans were prepared and implemented which sought to:

1. Improve living standards.
2. Effect better income distribution, and increase employment.
3. Bring about rapid progress and economic integration of the underdeveloped regions of the economy.
4. Achieve self-sufficiency through import substitution and strengthening of productive sectors.

Pakistan's economy is externally vulnerable to international factors depending as it does substantially on foreign trade. Pakistan's exports at roughly one billion dollars in 1974-75 constitute ten percent of the GNP. The imports account for more than twenty percent of the total goods and services produced in the country. Thus one-third of the goods are directly affected, while a much larger proportion is influenced indirectly. The level of exports as well as prices which Pakistan could get for these exports in world markets has obviously suffered. The combined loss on account of higher prices of imports and low level of export prices has been estimated at dollars 800 to 900 million in one year. The resources were thus reduced while the task of increasing investment became more urgent. The price pressures

were felt throughout the economy. The government had to carry out a defensive operation against these adverse terms of trade while keeping its offensive against stagnation in the country.

The past five years have been crucial in the economic history of Pakistan when national economy remained exposed to adverse domestic and international factors. The depressed level of private investment, slackening agricultural and industrial production, resulting in slower economic growth, accompanied by inflation and recession abroad have posed serious challenges for the policy makers. But now these factors are changing and have improved to some extent. The overall level of investment, particularly public sector investment, has substantially increased. The per capita consumption of foodgrains, clothing and the availability of other items of daily use has recorded notable improvement. The social services like medical aid and education have also improved. The development of the backward region of the country is receiving greater attention now.

A comprehensive outline of the Development Perspective (1975-80) was prepared in early 1975, but the launching of the plan had to be postponed due to an uncertain international situation. With certain visible improvements the Planning Division has now been directed to prepare a Five-Year Development Plan based on the strategy of high investment, high growth, and high consumption within the constraints of resource availability. Various studies have already been completed in this regard and intensive consultations with the central ministries and provincial governments initiated. The main elements of the development strategy to be reflected in the new Plan are :

1. To increase production as well as the availability of foodgrains. At present a significant proportion of the population continues to suffer from mal-nutrition, and the intake of calories is often less than the minimum necessary for maintenance of physical efficiency. This is a situation which is not only distressing in itself but which also constitutes a serious obstacle in the way of fuller utilization of manpower, increase in output, improved health and the ability of individuals to benefit from educational inputs.

2. To adopt labour intensive methods of production in order to minimise the use of physical resources. The principal cause of poverty in the country is a lack of adequate employment opportunities at a

reasonable wage. An increase in the number of jobs available would help in removing some of the worst manifestations of poverty.

3. To adopt an appropriate technology.

4. To modify the educational system in order to give it a greater vocational and technical bias so that the output of the system can be more easily absorbed in the labour force. The People's Works Programme is specially designed to promote rural employment. Although the government has taken special steps to solve the problems of the educated unemployed, the goal of full employment is yet far away. One of the principal challenges for the future is to evolve a strategy which maximises both output and employment.

5. To stress the mobilization of domestic resources if the tempo of development is to be maintained and dependence on foreign aid reduced. The methods of resource mobilization should be consistent with the economic objective of reducing income disparities. Many instruments of resource mobilization which are appropriate from the point of view of equity, such as direct taxes, are rendered somewhat ineffective due to evasion.

6. To stimulate and encourage private investment and to ensure that its pattern of investment is in line with the country's social and economic objectives.

7. To give due consideration to the development of backward regions of the country, especially those regions which have been neglected in the past.

In any economic strategy both short-term and long-term objectives have to be kept in view. These are sometimes in conflict and the government has to use its judgement as to the relative emphasis to be placed on investment of a long-term character and that which produces benefits immediately. Despite the temptation to concentrate on short-term gains, it is not possible to ignore those problems which require long-term solutions. In particular, investment in education, planning and basic industries, though slow yielding, has to be undertaken in order to safeguard the future prosperity of the country. In fact, at present, the planning authorities are making concentrated efforts to solve these economic and social problems.

The dimensions of economic planning have now been changed in order to meet the changed economic atmosphere both inside and outside the country. The objectives of economic planning are now well in accord with the needs of the people and the resources of the country.

# **A NEW INTERNATIONAL ECONOMIC ORDER : A CHALLENGE FOR THE THIRD WORLD**

*Khawaja Amjad Saeed\**

## **HISTORICAL BACK-GROUND**

History is replete with instances on the strength of which it can be safely asserted that Imperialists have been strengthening their hold over their colonies and transferring the resources of such colonies subjugated by them in various continents of the world to their own countries. No wonder that the call for a New International Economic Order came from Special Session of the General Assembly which was convened on a short notice at the request of Algeria. Initially, the idea was to discuss the question of "Raw Material and Development." However, the U.N. General Assembly met in a period of great economic turmoil and turbulence. The main principles of the older International Economic Order appeared to be crumbling in quick succession and the world monetary system collapsing in the year 1971. In 1972, there were wide spread harvest failures, specially in the African continent, and the prices of goods shot up. Stagflation also hit the world at large very hard and oil prices registered a rise of 4.5 times from January 1973 to January 1974. In this background, many developing countries of the world, Specially in the Third World, raised a very pertinent question: "Is there need for a new International Economic Order?" In this serious situation the Sixth Special Session of the U.N. General Assembly was convened from April 9 to May, 2, 1974, in New York with the object of making concerted efforts to search for a New International Economic Order.

### *Evidence of Inequities*

A question is being asked as to what is the evidence available in respect of inequitable distribution of wealth amongst the countries of

---

\*Chairman, Department of Business Administration, University of the Punjab, New Campus, Lahore.

developed world and the developing countries. An answer to this question may be available in the following factors :

1. The voting strength of developing countries in the World Bank and International Monetary Fund is less than 1/3rd. Their advice is hardly solicited when the big industrialised nations make decisions.
2. The present structure of the United Nations which was carved in the year 1945 appears to be crumbling as the majority of developing countries in the U.N. General Assembly did not produce any meaningfully decisive results for a New International Economic Order.
3. The bargaining strength of the poor countries is fairly weak.
4. Terms of trade in the past, have been working to the advantage of developed countries.
5. The developed countries have raised protective walls and these prevent the developing world from receiving their due share of the global wealth.
6. There is an imbalance in the distribution of International resources.
7. Trade Policies of developing countries are in favour of them and against the developing countries.

### **EFFORTS FOR EVOLVING THE NEW ORDER**

#### *Sixth Special Session of the U.N. General Assembly*

This session was held in New York from April 9 to May 2 1974. Attention of the developed countries was drawn to the need for reversing the flow of net transfers and putting an end to the exploitation of the developing countries by the developed world. It was noted in that session that net transfer of US \$ 250 billion was taking place annually from the developing countries to the developed countries. Nine basic tricks of this transfer were identified in that session.

The Pakistan delegation gave emphasis to rescheduling of debts, refund of import duties by the developed countries to the developing countries and greater production by all countries of the world.

On May, 1, 1974 two unanimous resolutions were passed :

The First resolution was a declaration laying down the basic principles for a New International Economic Order.



And the second resolution consisted of a Program for Action setting out measures to assist developing countries most affected by the prevailing crisis. The Charter of Economic Rights consisting of 34 Articles touched upon a wide variety of international importance. It was prepared over a 17 months period by a working group of representatives from 40-Member States under UNCTAD. The objectives of the said Charter were as under :

- (1) To establish generally accepted norms to govern International Economic Relations systematically.
- (2) To promote a New International Economic Order

It was also laid down that it will be reviewed after every five years.

#### *Seventh Special Session of U. N. General Assembly*

This was held from September 1 to 12, 1975. The Secretary General of the United Nations explained its theme as under :

“It is increasingly clear that ‘New International Economic Order’ is essential if the relations between the rich and poor nations are to be transformed into mutually beneficial partnership, otherwise the existing gap between these groups of nations will increasingly represent a powerful threat to international peace and security”.

The six issues which were debated and discussed in the said special session were as under :—

- (1) International Trade
- (2) Industrialization
- (3) Transfer of Resources and Monetary Reserves.
- (4) Science and Technology.
- (5) Agricultural Development.
- (6) Restructuring United Nations System.

The U.N. General Assembly in their 2349 plenary Meeting of 16 September 1975 passed several resolutions, laying out the shape of New International Economic Order.

#### *Manila Declaration*

In February 1976, the group of “77” now consisting of 112 countries, agreed on 17 points which are known as Manila Declaration.

On the basis of points contained in this declaration, the developing countries took a stand in the UNCTAD IV in which two groups were formed :

- (1) One Consisting of developing countries.
- (2) Other Consisting of Advanced Countries U.S.A., Japan, West Germany, Britain, etc.

Nine main topics were considered by the representatives of 154 participating countries. However, the two issues which dominated the discussion were :

(I) *Commodities*

This consists of three elements :

- (a) Degree of Instability in agricultural prices has increased sharply during the last three years.
- (b) Deterioration had taken place in the terms of trade of most exportable commodities.
- (c) The trading and facilities of infrastructure for commodities is largely in the hands of developing countries who get back only a fraction of final price that the consumers pay for their commodities in the International Market. The developing countries sought a permanent and just solution. through an Intergrated Program for commodities (IPC).

The current account deficit of non-oil producing countries was as under:

Year	Amount (In US \$ in billion)
1973	11
1974	36
1975	45

The total debt of the above countries was estimated at US \$ 120 Billion.

(II) *Debt Servicing*

For many developing countries, debt-servicing burden had mounted very high and the developing countries asked for rescheduling of debts including deferment of repayment and extended amortization period. Further, it was argued by developing countries that the debts against poor countries with per capita income of less than US \$ 200 be written off.

However, the argument of developed countries was different. They showed an inclination toward commodity by commodity approach. In this respect, Germany and Britain turned out to be hard liners. U.S.A.'s Dr. Henry Kissinger suggested the establishment of International Resource Bank (IRB) as an arm of the World Bank with an initial capital of US \$ one billion. Further, the argument of developing countries for cancellation of all debts against the least developed countries was not accepted.

#### *Mexico Moot*

The Third World Economic conference began in Mexico on September 13 and ended on September 23, 1976. From 117 member countries, 350 delegates participated in the deliberations. The Mexico moot, beside other items, recommended the use of a preferential trade system among the world's poor countries and the establishment of the Third World Bank and Common Currency. Other recommendations were:

- (1) The creation of a special fund for supporting the prices of basic products.
- (2) The calling of a conference of secretariats of producers associations to create a world council of producers associations.
- (3) Increased food production and cooperative food exporting companies,
- (4) Increased participation by the developing countries in world industrial production.
- (5) The creation of multinational shipping companies and
- (6) Establishment of a data and information bank to increase technical cooperation among the Third world.

#### ARGUMENTS AGAINST THE NEW INTERNATIONAL ECONOMIC ORDER

It is very important that we should critically review some of the arguments which are generally advanced against evolving a New International Economic Order. These are:

- (1) Austin's Theory of Imperative Law. Austin had argued that International Law is really not Law because there is no enforcing authority. So it is deduced from this argument that even if a New International Economic Order is evolved, there will be no enforcing authority in the world invested with powers for its implementation. However, the need for an effective United Nation's role can not be ignored.

- (2) Most of the economists, including Sir Roy Harrod have argued that it is advisable to have a new National Economic Order rather than asking for a New International Economic Order. Advice generally is given in respect of reducing population, decreasing defense expenditure, avoiding mismanagement of economy and borrowing less from abroad by accelerating the domestic mobilization effort at the home front. This is a typical argument for side-tracking the issue.
- (3) The developed countries argue that they had worked hard in the past, nature had bestowed them with resources, and therefore why should the developing countries grumble. The imperative need for sharing the prosperity is thus ignored.

However, most of the arguments advanced do not have any effective force and they represent typical side-tracking tricks so that the vigorous demand for a New International Economic Order is postponed indefinitely.

### OBJECTIVES OF THE NEW INTERNATIONAL ECONOMIC ORDER

In our opinion, the objectives of the New International Economic Order should be following :

- (1) To eliminate injustice and inequality which afflict vast sections of humanity and to accelerate the development of developing countries.
- (2) To implement a program for action on the establishment of a New International Economic Order as well as the Charter of Economic Rights and Duties of States.
- (3) To review the International Development strategy for the Second United Nations Decade for achieving the said objectives.
- (4) To achieve greater cooperation in the fields of trade, Industry, Science and Technology as well as in other fields of economic activities.
- (5) To increase the capacity of developing countries, individually and collectively to pursue their development.

#### *Role of Various Sections of World Economies*

In order to develop a guide-line for a New International Economic Order, it is necessary that we may study the position of developing countries, with developed market economies and European Socialist

countries, After this review, we may be able to have an idea as to the guideline for formulating a New International Economic Order on sound footing.

#### *Position of Developing Countries*

Developing countries have stressed that the approach for a New International Economic Order should be comprehensive and not piecemeal. For a negotiating strategy, the 1974 Dakar Declaration gave emphasis "to recover and control their national resources and wealth and the means of economic development". In order to achieve this objective it was agreed at Dakar "there is an urgent need for developing countries to change their traditional approach to negotiations with the developed countries, hitherto consisting in the presentation of list of requests to the developed countries and an appeal to their political goodwill which in reality was seldom forthcoming".

The new strategy to negotiations which the Dakar Declaration urged would involve the following :

- (1) Common action to strengthen the bargaining position of the poorer countries :
- (2) More economic activities among themselves ;
- (3) A strategy based on principle of relying first and foremost on themselves.

#### *Position of countries with developed market economies*

While the Declaration and Program of action on the establishment of a New International Economic Order was adopted by the U.N. General Assembly without a vote, strong reservation was made by the United States of America, Japan and Federal Republic of Germany. Emphasis by the developing world is on the following areas :

- (1) Cooperation for economic and social development.
- (2) Liberalization of trade and access to the market.
- (3) Agreements to stabilize prices of primary commodities (Case by case approach).
- (4) Increased transfer of real resources to developing countries, and
- (5) Equitable participation in world monetary policy making.

*Position of European Socialist Countries.*

The Soviet Foreign Minister proposed that armament expenditure by the permanent members of the Security Council be reduced initially by 10 per cent and that part of the resulting savings be diverted to the development of poorer countries.

However, the European Socialist Countries endorsed the call for a New International Economic Order. While calling their relationship with the developing countries as mutually beneficial, they described the relationship between capitalist countries and developing countries as exploitative.

**SUCCESS ACHIEVED SO FAR**

In our opinion, the measure of success so far achieved can be judged from the following :

- (1) There is a hectic search for proper negotiating forums to discuss issues still further to result in the development of a New International Economic Order.
- (2) Some broad areas of negotiations and a few negotiating principles have emerged from various resolutions passed at the 6th and 7th Special U.N. General Assembly Sessions and the rich West is beginning to realize that time has come to share the prosperity of the global wealth in an equitable manner. It is being increasingly felt that it is too much for 6 per cent of the total population of the world living in U. S. A. to enjoy 40 per cent of the world resources.

*A New Frame-work for U.N. Organizational Structure*

Time has come to have a fresh look at the present U. N. organizational Structure which is not delivering the goods. Thirty one years have passed and the structure has remained the same. Proposals for recording Economic and Social Aspects of U.N. structure have been made by an International group of 25 experts who were nominated by their countries. 'A New United Nations Structure For Global Economic Cooperation' proposes changes which are an urgent need of the hour.

These are required in the following areas :

- (1) The General Assembly: its duties and the effective set up for economic and Social Council for conducting their deliberations and policy making work in a fruitful manner.

(2) Implementation of the United Nations systematic action program.

*Conclusion*

"Imperatives of Unity" call by the Pakistan's Prime Minister in his signed article of September 5, 1976 has under-lined the theme of unity amongst the countries of the Third World. An extract from his said article is quoted below:

"Unity is nurtured by mutual accommodation. It is born out of the realization that in its absence every one's interest will inevitably suffer".

It is hoped that sanity would prevail among the developed countries and, with the holding of a summit of Third World Countries a New International Economic Order would be evolved.

# THE ECONOMICS OF LOW-COST HOUSING

## —A Study of two Housing Schemes of Lahore

Sajid Hussain\*

### *Introduction*

Lahore, the second largest city in Pakistan, is confronted with the problems of an exploding metropolis. Its population is estimated to have increased from 1.30 millions in 1962 to 2.15 millions in 1972 with an annual increase of 80,000 persons or 15,000 families. Its boundaries have become obscured. Its physical growth is through the accretion of new planned sub-divisions but mostly through unplanned haphazardly developed parcels of land. Nearly 80,000 families are estimated to be living in jhugi and katchi abadis. The downtown core manifests a massive complex of slums, blighted neighbourhoods, congestion and sub-human living conditions.

There is an estimated backlog of over 200,000\*\* housing units in Lahore, which are required for lower and middle-income groups. More than 60% of the existing housing stock needs major renovation and replacements. A critical situation exists in transportation and traffic sectors. The public transit system is not only inadequate but is confronted with numerous problems. Likewise, public services and utilities are faced with unprecedented burden due to rapid and haphazard growth. The health, education and recreation facilities, environmental sanitation services e.g, water supply, sewerage, drainage and soil waste disposal are severely constrained due to technical difficulties arising out of haphazard growth and increasing limitations of resource.

---

\*The author is an old Ravian. The article is a part of his thesis for Masters degree.

\*\*An LMC survey some time back, found that while the total number of dwelling units needed in Lahore was around five lakhs, the present availability hardly exceeds 3.5 lakhs. The gap represents the immediate need only. The future requirements are much more demanding. It is estimated that 80% of the existing houses will become practically uninhabitable 20 years from now and will need to be replaced or rebuilt. (PAKISTAN TIMES, December 18, 1975.)



The metropolis suffers from socio-economic disparities. For example, an area with a population of over 500,000 in the northeast of Lahore beyond Aik Moria, Do Moria bridges, comprises of living quarters and is devoid of community facilities.

Various planning surveys indicate acute housing shortage which will further be aggravated due to increase in population and decrease in the effective housing stock during the next decade. The problem is twofold: (1) We need to replace or rehabilitate the housing units which have outlived their life or will become obsolete in the next twenty years. (2) We need to increase the housing stock to replenish the existing housing shortage to cater for the additional population.

A socio-economic survey of Lahore reveals that about 54% housing units do not have kitchens, 54% do not have bathrooms, 12% are without latrines and 27% do not have electric supply. Only 35% of the city dwellers live in houses owned by themselves, whereas 65% of the people live in rented houses. Of the entire housing stock 5% need to be immediately replaced and would become ripe for being replaced in the next five years and 52% in the next 20 years. This means that after 20 years almost 82% of the housing stock would become unfit for human habitation and would need both replacement and/or major renovations. In addition to the housing stock which have to be planned or replenished during the next two decades, the anticipated additional population of 1.7 million has also to be catered for. The dissolution of the joint families and expected growth of single families will lead to a further shortage of houses.

### CRITICAL EVALUATION OF GULBERG AND SHAD BAGH HOUSING SCHEMES\*\*\*

Gulberg and Shad Bagh Housing Schemes cannot be in any way regarded as opposite poles, but there exists a sharp distinction between the two. Both the schemes have their own merits, but they are also subject to several defects.

#### *Housing Information*

##### **Uneconomic Use of Land:**

No one can deny the importance of land to a house. One cannot imagine of laying the foundation of a house in the air. Moreover, the value of a house depends on the land on which it is located. In case,

---

\*\*\*The former is termed as a Colony for the high-income and the latter as a colony of the poor classes of the city.

the house is built on a land which has a central location, i.e. in the heart of the city, it will definitely fetch more price. There is no denying the fact that land is always scarce, especially good land. Another feature that adds to the importance of land, is that it is not only used for building a house, but can be utilised for commercial, industrial and other purposes. In other words, land is important because of two basic reasons. Firstly, it is scarce, and secondly, it can be utilised for several purposes.

Applying the hypothesis, let us now analyse the use of land in Gulberg Schemes.<sup>1</sup> In Gulberg Scheme No. I there is a provision for 73 housing plots of 12 kanals each. In Gulberg II there are 40 plots of varying sizes, 44 plots of 12 kanals, 38 of 8 kanals, 44, 94, 346, 241, 69, 104 plots for 6 kanals, 4 kanals 2 kanals, 1 kanal, 10 marlas and 7 marlas respectively. Details of Gulberg III are mentioned in Table No. 2. Gulberg Scheme No. IV also comprises only of big plots —9 plots of 12 kanals, 60 plots of 8 kanals, 6 plots of 6 kanals. In Gulberg V there are 53 housing plots, including two of 12 kanals, 16 of 8 kanals, 30 and 5 plots of 6 kanals and 4 kanals respectively.

TABLE No. 1

## PLOTS OF VARYING SIZES IN GULBERG SCHEMES

<i>Area</i>	<i>No. of plots</i>	<i>% of Total No.</i>
12 kanals	128	3.04
10 kanals	208	4.93
8 kanals	361	8.56
6 kanals	234	5.55
4 kanals	736	17.48
2 kanals	603	14.29
1 kanals	864	20.52
10 marlas	587	13.69
7 marlas	104	2.47
5 marlas	399	9.47

Table No. 1 highlights the division of land into various categories. Out of housing plots in Gulberg 47.15% are of one kanal and less. The total number of plots that fall in this category are 1954 covering an area of 1,273.5 kanals. In case area covered up plots of more than

1. Posh localities, like Shadman and Gulberg, represent almost a criminal waste of scarce urban land and have hardly the answer to the needs of the vast majority of the people belonging to the low and middle income groups. (PAKISTAN TIMES, Dec. 18, 1975),

1 kanal is added, it becomes 12, 158 kanals. Before we analyse this state of affairs regarding the utilisation of land with respect to density of population, we should also have a view of plots situated in Gulberg III.

TABLE NO. 2

## Plots of Varying Sizes in Gulberg Scheme III

<i>Area of Plots</i>	<i>No. of Plots</i>	<i>% of Total Plots</i>
5 marlas	399	12.4
10 marlas	518	16.2
1 kanal	623	19.5
2 kanals	357	11.1
4 kanals	637	19.9
6 kanals	154	4.8
8 kanals	247	7.8
10 kanals	258	8.3

This table corresponds to the conclusions arrived at in the previous table which included all the Gulberg Schemes. In Gulberg Scheme III, the sizes of 48.1 % of the plots are 1 kanal, 10 marlas and 5 marlas. The total area of the houses built on an area of 1 kanal and less in Gulberg Scheme III comes to 926.4 kanal, and rest of the scheme comprises of land equal to 8,742 kanals.<sup>2</sup>

In this context, houses built on an area of 5 and 10 marlas can be exempted from all sorts of criticism, even one-kanal house, regarding the uneconomic use of land. Neglecting all other factors, if in the Gulberg Schemes all the houses were built on land measuring one kanal, it would have provided an additional provision of 9,089 houses.<sup>3</sup> It would have solved housing problem of nearly one lac persons.

The construction of big bungalows would not have been criticized so severely had the major portion of the land been covered (built-up). Survey of 100 houses indicated that only 31.2% of the area was covered by the building structure. And that in case of 6 kanal to 10 kanal plots only 13% of the land was utilized. In case of one-

2. Shops are excluded.

3. The present number of houses built in area of more than one kanal is 2,270. In case this land was divided into one kanal plots, the total housing plots would be 12,159 plots. Thus providing accommodation for additional 9,089 families.

kanal plots, houses were constructed on nearly 300 square yards each, and in case of 2-10 kanal house only 756 square yards were used for construction. Another aspect which is interesting to point out here is that accommodation provided by the houses does not differ much. In case of 10 marla-houses, there are three bed rooms, and in case of bigger houses, the accommodation is the same, except for one more bed room. The difference between the two categories is only due to slight difference in measurements of the rooms.

The provision of big plots in Gulberg looks inhuman, and the greatest cruelty to the people who are shelterless. It was the callousness on the part of Lahore Improvement Trust to provide such luxury houses to a special group of people at the expense of the poorer class. Had the space been properly used, it would have solved the housing problem of Lahore to a very large extent.

Originally it was a wrong policy on the part of the Lahore Improvement Trust to provide plots for spacious bungalows. The Lahore Development Authority has realised the failure of Lahore Improvement Trust policies and this is evident from the fact that now the big houses have been declared commercial areas. This policy tremendously benefitted the owners of big bungalows, but has certainly not helped in solving the housing problems of the millions. It may be pointed out that people have very good buying centres, nearer to their living places, so declaring palatial houses as commercial areas has added no new facility.<sup>4</sup> This policy of declaring Gulberg as commercial zone is against the basic objectives of Lahore Development Authority, whose purpose was to tackle the housing problem.

#### *Land Utilisation in Shad Bagh*

The houses in Shad Bagh are built on an area of less than one kanal, as is clear from the survey report. Most of the area in Shad Bagh is covered. According to Table No. 28 it is 53% of the total area. So it will be fallacious to regard Shad Bagh as an area where uneconomic use of land was made. On the contrary, land in Shad Bagh was not utilised in the best possible manner. In Shad Bagh the structure of the house is such that there is no connection between different rooms. The rooms are small and dingy. No provision is made for cross-

---

4. All the big houses in Gulberg are in the process of being converted into restaurants, offices, and boutiques, etc.

ventilation, and the direction of the house is against wind and sunshine. Above all, there is no good provision of bath rooms and wash rooms. In an average house, there is just one bathroom. To conclude, it may be said that though no land has been wasted in Shad Bagh there are structural defects which make living somewhat difficult. The design of a small house reveals that decent accommodation can be provided on the same plot.

### *Use of Capital*

#### **Gulberg:**

Another important aspect which is worth mentioning regarding the wastage of resources in developing a housing project, is about the utilisation of capital.

In Gulberg, where land was wasted, capital was not used in the best possible way. There could be no controversy about the fact that a lot of money would have been saved if low-cost construction techniques were applied to have building in this area. There was no economic or social rationale determining the construction pattern. Two reasons accorded for spending so much money on house construction in Gulberg are false social prestige, and the amount of money, possessed by the people in abundant quantity.

People living in Gulberg, especially the relatively richer ones, believe that big and luxurious houses would enhance their social status. During the survey it was revealed that the difference between the cost of construction on plots of various sizes is due not only to the capital spent on exterior decoration, but also to the capital spent on interior decoration i.e. lighting, sanitary fittings etc.

#### **Shad Bagh :**

In Shad Bagh houses were constructed from the utilitarian point of view. No open spaces or courtyards were left in the houses. No amount of money was wasted on face-lifting of the house. The houses have very simple and plain outward appearance. They are mostly plastered with cement. No colour emulsion or distemper has been used on the exterior walls of the houses.

As the houses are lacking in open-space, their occupants use the tops of the roofs during the hot season for sleeping purposes. As regards interior decoration, the walls have been white-washed, and floors have made of red or coloured cement.

The houses also usually do not have any verandahs. This is a clear indication that houses have only been constructed from the viewpoint of maximum utilisation of the space and unnecessary wastage of capital has been scrupulously avoided.

Another feature of the housing project in Shad Bagh which is worth mentioning is the fact that the houses are 'row houses'. Row houses signify that there are dead walls between the houses and no open space left between them. These walls can be utilised for construction purposes on adjacent plots.

### *Social Characteristics of Neighbourhood*

#### **Gulberg :**

No one can deny the importance of neighbourhood in building houses. Absolute privacy is neither desirable nor possible. Association with neighbours is a necessary and perhaps valuable part of living for most city-dwellers. Sometimes the social desirability of a neighbourhood is significantly influenced by the past history of the area. Some localities are known as "fashionable" while others suffer from a relatively bad name.

It would not be wrong to regard Gulberg as an area of 'social vacuum.' Social vacuum means that there is no neighbourhood relationship among its residents. In Gulberg the people are not even aware of their next door neighbour. Neighbours are regarded as a blessing especially when one is in trouble. But in Gulberg every house is in itself an island, and all their inmates want to live in complete isolation. The residents live for themselves and by themselves. A resident of a house surveyed told me an incident which would support my view about Gulberg's social vacuum. He said :

"A few days back, two burglars broke into their houses at night. The women in the house started shouting and pleading the neighbours for help, but no one came to their rescue. They, however, did receive a phone call from their next door neighbour, who asked them not to shout, as it disturbed their sleep."

To conclude, the houses in Gulberg possess all the internal requirements for the individuals residing in them, but it is painful to point out that from the social and humanitarian point of view the people living in this fashionable area are lacking the qualities of being good neighbours. It seems that these people have been deeply

influenced by the material approach to life of the West. They have deviated from the traditional values of their forefathers. This is evident from the fact that they have separated themselves from their hereditary home.<sup>5</sup>

#### Shad Bagh:

Shad Bagh is definitely full of defects disoussing from the structural and architectural point of view, but from socio-economic point of view it is an ideal place to live. Probably the phenomenon that poor people have good relationship with one another, due to economic insufficiency, is true in Shad Bagh. Living there is more cohesive and people are fully aware of the problems of their neighbours, and always ready to share their joys and sorrows. This was what was discovered by me and my friends who accompanied me on these surveys. To prove this intimacy among neighbours, it is relevant to cite an incident.

"One of the boys living in the first house we surveyed in Shad Bagh took us to about 10 houses in the vicinity of his house. The boy knew the names of the family members of each house and was welcomed warmly wherever he went."

This state of affairs does not exist in Gulberg. It is not untrue to say that Gulberg has beautiful and big house but socially speaking Shad Bagh is a much better place to live.

#### *Contribution to Labour Force*

##### Gulberg :

One very dark aspect of the Gulberg area from socio-economic point of view is that the people who are able to work are not contributing directly or indirectly towards the development, especially the women-folk are neither doing out-door jobs nor fulfilling the duties of a housewife. Women of the area suffer from a sense of false social prestige by remaining idle. One can find great familiarity between wives of the Gulberg aristocrats and the feudal lords of Medieval Britain and pre-revolution Russia.

##### Shad Bagh :

In Shad Bagh a greater percentage of people belong to the labour force. This is evident from the fact that there are more than one earning members in each family without any exception. This is in

---

5. 70% of families in Gulberg are single.

sharp contrast to just one earning member in Gulberg. Women-folk in Shad Bagh though are not actively participating in out-door activities, but are performing their domestic duties to their utmost capacities. This is highlighted by the fact that there are few servants in Shad Bagh.

*Utilities Available*

TABLE NO. 3  
CATEGORY-WISE UTILITY AVAILABLE IN GULBERG

Area	House Surveyed	Electricity	Telephone			Sewerage	Natural Gas
			Yes	No	Number of telephone installed		
5 marlas	15	In all houses	1	15	1	All houses	All houses
10 marlas	15	"	5	10	5	"	"
1 marlas	25	"	15	10	10	"	"
2 kanals	15	"	13	2	14	"	"
4 kanals	10	"	10	—	26	"	"
6 kanals	10	"	10	—	24	"	"
8-10 kanals	10	"	10	—	31	"	"

**Gulberg :**

Table No. 3 clearly depicts the presence of all the basic utilities i.e. electricity, water supply, sewerage, natural gas in all the houses surveyed in Gulberg. As regards telephone facility, it is provided in nearly 60% of the houses. Though the facilities are easily available to the residents of this area, their supply and service is rather poor. The availability of these utilities add tremendously to the value of these houses and for this reason people prefer this locality for living to others, even though it is regarded a far-off place.

It will not be out of place to discuss the quality of civic amenities at the disposal of the residents. In the survey carried out, the residents invariably pointed out the depleted and neglected condition of the streets, roads and street lighting. They observed that the roads and side lanes at many points had humps, depressions, pitfalls and at various places badly broken.

Hence during rain there result pools of stagnant water. This cannot only create traffic problems, but also breed mosquitoes, create hygienic and health problems, which is again a great hazard for the health of the residents. At the same time, it is regrettable to point out that the residents, though they are themselves directly entangled



and affected by this state of roads, they are entirely apathetic in maintaining and renovating the road on a self-help basis which they can easily do, as is evident from the per capita income table. Poor lighting in the streets is a great danger for the public safety of the people, and results in road accident and robberies. It is interesting to note that the main roads are in good condition, and the street lighting there is being properly maintained. These roads are wide and carpeted, they give a good panoramic view because of the plantation of trees and flowers on both sides of the roads. As regards street lighting on the main road it is relatively better<sup>6</sup> than that of the interior Gulberg, but even there it is not sufficient.

TABLE NO. 4  
UTILITIES AVAILABLE IN SHAD BAGH

Area	House Surveyed	Electricity	Telephone		Sewerage		Gas		Watersupply	
			Yes	No	Yes	No	Yes	No	Yes	No
less than 10 marlas	25	All houses	0	25	11	14	12	13	25	0
Over 10 marlas	25	All houses	2	20	20	5	18	7	23	0

**Shad Bagh :**

Table No. 4 is indicative of the fact that the people of Shad Bagh do not enjoy all the amenities which are a pre-requisite of decent and comfortable living. All the houses are provided with electricity and water supply. But power failure and ineffective water supply are a common phenomenon. Very few houses have natural gas connections and other sources of fuel are a heavy burden. The residents are restless and are doing their utmost and pressing the gas authorities for early installation of pipeline. Telephone facility is negligible. To overcome this hardship, even public telephone booth has not been provided. There is no proper sewerage system in the area, as a result there is lot of dirt, filth and over-flowing of drains. It should be pointed out that Shad Bagh is a low-lying area and during the rainy seasons, there emerges slush and creates problems for the smooth flow of traffic. Due to the absence of a good drainage system, standing and stinking water becomes a permanent source of nuisance for the residents. This also creates hygienic problems.

6. At some places there is complete darkness.

Roads are in a very deplorable condition. Either there are no pucca roads in the lanes or by-lanes and if at all there are pucca roads, they present a miserable picture.

It is surprising why P.W.D. and other concerned authorities are so reluctant to pay heed to the genuine problems of this highly populous area of Lahore. These areas need top priority because they are overcrowded and congested. If no proper arrangements are made for the drainage, roads, and other facilities in the near future, there is a possibility of this area being turned into a slum.

The problem of this locality do not end here. The absence of street lighting is still another big problem for the poor and pitiable residents of this area. Due to darkness women and children hesitate to leave their houses after sunset. Without street lighting, the darkness gives the impression as if there is no locality existing here.

#### *Community Facilities*

##### **Gulberg :**

The availability and nearness of shopping, medical facilities, and educational institutions,<sup>7</sup> determines the value and the rent of house.

Gulberg, irrespective of its schemes, has an excellent location, so far as community facilities are concerned. Lahore's best shopping centres, medical clinics and hospitals and colleges are within two to three miles from the centre of Gulberg.

There are hardly any good libraries in Lahore, not to speak of either Gulberg or Shad Bagh. Mosques are not far-off. If facilities are far from the residential area, it does not create problems. Undoubtedly, the reason for this being excellent system of transportation, both public and private.

##### **Shad Bagh ;**

On the other hand, the situation of community facilities is far worse in Shad Bagh. There are no decent shopping centres, and educational institutions are far-off. The situation is all the more aggravated by the absence of public transportation (L.O.S.). The women especially face great difficulties in getting any conveyance because the taxi and rickshaw drivers are reluctant to go to that area because of the dilapidated condition of the roads. The transport

---

7. All these are lumped under community facilities.

facility which is within the reach of the residents of this locality is the tonga and tongawallas charge fare according to their sweet will, because they enjoy a monopoly. Men in this locality usually use bicycles as a handy means of transportation.

The position as regards the shopping areas is also very poor. Besides the availability of the daily necessities of life, such as vegetable, meat etc. for the satisfaction of the remaining requirements, these people have to go to shopping centres in Anarkali and the walled city.

The Shad Bagh people are also deprived of the hospital facilities, they do not have even a dispensary. It has been noted that the private clinics of recognized practitioners are also not sufficient in number or adequately provided for the sick to visit them. The people in their turn here are reluctant to visit doctors and still have firm faith in the 'hakims'.

#### *Lahore Development Authority Schemes and the Development Plans*

##### **Gulberg;**

It may be brought to light that all the Five Year Plans of Pakistan and all the present Annual Development Plans aimed at providing low-cost and utility houses to the bulk of the people. It may be noted here that the present regime has laid particular emphasis on providing colonies for the shelterless. The houses built by the government will be provided to the people on easy instalments.

The Gulberg schemes do not fulfil the above objectives. For instance, in place of building a 12-kanal palace if low-cost houses of 5 marlas each were constructed, 48 families could have found shelter instead. If a multi-storeyed building with flats (such as flats in Karachi) had been constructed, there also a great number of families would have been provided with living accommodations. Three-storey buildings are suitable for the people in Lahore to live, which means that 144 families could have been easily provided with residential facilities. It is also interesting to note that shops could have been provided on the ground floor, to enable the people to purchase their daily necessities without going anywhere. If the housing schemes in Gulberg would have been implemented in this manner the Gulberg housing area, would not have extended to such a large extent as it is today. Due to this erroneous implementation of the Gulberg Scheme, the earlier buyers of the land, purchased the land at cheap rates and

constructed large bungalows, and within a short span of time the entire Gulberg area was completely dotted with large bungalows. No vacant plots were left for late comers for constructing houses in Gulberg. These people now had to buy land for the construction of their houses in the far-flung and remote corners of Gulberg. These people had to face the problems of transport, marketing educational facilities for their children, because the well-established and renowned institutions are very far off from their places, as compared to the residents of main Gulberg, who have within their reach institutions like F.C. College, Home Economics College, Kinnaird College etc.

In case the Gulberg schemes were implemented in line with the objectives of the Development Plans, it would have been beneficial from both the collective and individual points of view.

#### **Shad Bagh :**

Contrary to this, the Shad Bagh housing scheme was in conformity with the plans. So innumerable families have been accommodated on a much smaller space. Though there are definitely some defects in the scheme, here both land and capital have been used in most economical way.

#### *System of Allotment of Houses and Plots*

Allotment of houses and plots has no concern with the socio-economic or the housing conditions of the two areas, but concerns directly with the policies of the Lahore Improvement Trust (now Lahore Development Authority).

Prior to the year 1961, the allotment of plots and houses was based on a system of drawing the lots. But the system was not without defects and proved to be a complete failure. The people thought that there was injustice in the system because a genuinely interested and deserving person with the potentials of constructing a house in Gulberg had no certainty that his name would come out in the drawing of lots. The Lahore Improvement Trust realised its folly and to remedy the situation it introduced the scheme of auctioning the plots to the highest bidder. This system though bore more advantages as compared to the previous system, was not an ideal system either. The auctioning of plots entirely closed the possibility of accommodating the lower-income and middle-income groups, because these groups did not have sufficient financial resources at their disposal to compete with the moneyed class. This created social injustice and failed to give a fair chance to all.

Moreover, the very glaring drawback of the Lahore Improvement Trust policies regarding the allotment of houses and plots, was that a person with surplus and superfluous wealth could purchase as many plots as he wished. This meant that a person who had no house was not offend an opportunity to buy one. This may be supported by the fact that today one man is an owner of more than one house.

### SUGGESTIONS TO SOLVE HOUSING PROBLEM

Housing for the people belonging to the low-income groups has been a problem in Pakistan since its very inception. But with an increase in population and a stepped up tempo of industrilization, it has assumed the form of a crisis. The movement of workers from rural areas seeking employment in towns and cities is incessant. Likewise there is an ever-growing expansion in governmental and non-governmental establishments where all the white-collar job holders do not come from the places where they work and could look upon their ancestral dwellings for their own lodging purposes. They come from far and near and need accomodation. It is, therefore, absolutely imperative that more houses are built to provide them with suitable residences. The task is so stupendous that neither the government nor the private sector can handle it single-handedly. They should both operate separately as well as jointly. This is all the more necessary, for the government with its limited financial resources, cannot accomplish this task by itself alone. On the other hand, private enterprises in the field of construction will need not only guidance but also help from the government in doing the needful. Half measures and stop-gap arrangements can hardly solve the problem.

It is suggested that the government on its part should create a high-powered urban housing authority. This authority should be asked, in the first instance, to examine the weaknesses and deficiencies of the framework of the existing institution and to formulate new policies to tackle the problem of house-building in urban areas effectively. Secondly, the authority should sponsor and encourage private enterprise in the particular field of civic activity, by popularizing a variety of projects and programmes. It should help in the setting up of cooperatives houses for low-income people and persuade government, local, provincial, or federal to place land at suitable locations and at reasonable prices below the market price at the disposal of these cooperatives. It should also urge the government and government-owned and

controlled financial agencies to earmark reasonable amount of money for the purposes of house building advances to these cooperatives when needed and recover it in easy instalments after charging a fairly low rate of interest. The authority should also work for concessions in regard to property and other taxes to encourage new housing developments. Last but not the least, the authority should not only encourage large business and industrial concerns to provide accommodation to their employees either free or at fairly low rents but also provide grants and loans to individual employees and their cooperative organizations to build houses on their own.

The creation of an urban housing authority at government level is suggested in view of the fact that the socio-economic order in our country is administration-oriented. Here people look to the government to take an initiative in almost every thing that is planned to be done in any walk of life.

#### *Solution to the Problems of Housing*

Following are some additional suggestions for the solution of the housing problem in the country :

Indirect governmental intervention by employing measures to accelerate the overall economic growth of country and consequently to increase the income of the individuals. But it will have little success if population explosion is not stopped for then we will have social and economic stratification of the society. Even highly well-meant and ambitious economic plans go aray, if there is no check on the multiplying population. In that case the real increase in per capita income will be small, especially in the low income group.

Direct official intervention by introducing legislation forcing others to contribute towards the solution of the housing problems (taxes, loans and subsidies to local bodies etc.).

This method usually encounters some social resistances and taxes for rehabilitation or housing, even if introduced, are of short duration and seldom of substantial magnitude. Loans or subsidies to local bodies are usually not very substantial. Besides, the local bodies tend to utilise for more economically promising kind of housing.

Direct intervention in the form of undertaking building of housing colonies by the state, either as grants, or with some other expectation for the return of capital outlays in the long run. This method, although often leads to initially impressive achievements, usually does not take

on the character of a permanent mass action and becomes limited to demonstration and prestige projects directly affecting only a limited chosen group of people.

The problem of over-congestion or over-urbanization in relation to economic development will have to be tackled simultaneously at two levels, namely local and regional. At the local level immediate action is required for re-development of slums, the renovation of community facilities and services enhancing the efficiency of public transport system in order to reduce the time spent in journey to work and provision of low cost housing at suitable places to relieve the over-congestion. Action at the regional level is necessary to stop and detract the shift of rural population. The influx of people could be diverted to the other neighbouring towns in the region by creating employment based towns.

Maturity of a nation's housing programme can be judged with a fair amount of accuracy by the regard which is paid to housing standards. The standards aim at livability by ensuring adequate light, air, privacy, safety and healthful environment. Background research studies should be carried out for the determination of minimum housing standards like angle of lighting, day light indicators, required window exposure, dimensional requirements as well as extent and nature of premiums for including certain design features.

To exercise better control of use of development land and to check the spiralling trend of land values, it is highly desirable that the government should promulgate forward-looking urban land policies. In fact, agrarian reforms coupled with rural-urban shift has already had appreciable impact on land values. Among other things which should be considered are:

- (1) Limiting the area of urban land holdings.
- (2) Allotment by government of residential sites on lease-hold basis rather free-hold basis.
- (3) Authorising the improvement trusts and other civic bodies to acquire land or declare their intention to acquire land for development schemes and other allied public purposes in advance of framing detailed schemes so that land speculation could be stopped.

Exploitation of locally available materials for building purposes and making them available to the general public at cheap rates.

Liberal tax holiday should be allowed for the low and middle income group housing.

If we construct single-storey houses on seven or 3½ marlas for the entire low-income group which constitutes 72% of our urban population, large tracts of land would be needed to house them. It is, therefore, felt that any proposal which would enable us to build vertically rather than horizontally would not only economise in the utilisation of land but would also considerably reduce the development cost of public services. There is, however, a general impression in the Punjab that flats are devoid of the advantages of outdoor living due to the absence of courtyards and do not suit the climatic conditions which require outdoor living for about five to six months in a year. This preference for outdoor living has limited the housing units to two-storey flats. A solution to the problem lies in an attempt towards the provision of open or semi-open spaces with each housing unit on each floor to meet with the outdoor living habits of the people. The proposition of multi-storeyed walkups, therefore, needs research and poses a design challenge to Pakistani architects.

#### *Pre-fabrication:*

Pre-fabrication is based on making the components in a factory and assembling them at site. A permanent pre-fabricated house essentially makes excessive use of cement in construction. Our dream to provide shelter to the majority of our population is dimmed by the fact that cement is always in short supply. The only possible way out of this impasse to provide decent housing facilities to all without stretching the demand on cement, is to exploit the use of prefabricated brick panels for walls as well as for roofs. Similar technique is popular in some parts of the continent where perforated bricks are used to manufacture panels in the factory. The wall units are given the desired finish in the factory and are lightly reinforced to withstand handling stresses. This type of pre-fabrication appears to be quite suitable for Pakistani conditions. The only snag in it appears to be a slightly higher percentage of steel required but research could find an answer to this problem.

#### *Architectural Solution for Low-Income People*

Direct, allotment of land to low-income people.

Each plot measuring 80 square yards and above, with definite undertakings from the allottees to build according to approved type-



plans within specified time limits, should be tried as an alternative to provision of ready constructed houses. Interest-free loans should be provided to those who have managed to construct upto plinth levels.

Provision of ready constructed houses as per under-mentioned categories, composed of maximum numbers of multi-storeyed structures and also some ground floor houses.

The suggested categories are as follows :

- (a) Three-roomed adjoining tenements consisting of ground and four upper floors.
- (b) Two-roomed adjoining tenements consisting of ground and four upper floors.
- (c) Single-roomed ground floor emergency houses in 80 square yards 12 square yards each, with the provision of future expansion of two additional rooms in each tenement.

At least one living room of each one of the above categories should have a size of 14 x 11 whereas, the other rooms could be smaller. Large covered verandahs can also be constructed.

The above proposals cannot, in any way, be called ideal, but are framed within the knowledge of a number of constraints, such as the initial financial outlay and the inability of the low-income people to pay back the loans etc. and this acts as a great handicap in the way of proper planning.

#### *Measures to Economise Cost of Construction*

**Walls**—for all ground floor structures with small spans for main rooms, the thickness of load-bearing walls could be reduced to provide good compact cement concrete in the proportion of 1 : 3 : 6 to be used for the same. The general practice of using 8" or 9" thick walls for direct compressional stresses is superfluous.

**Form work** — If, in place of the conventional wooden shuttering with the colossal cutting and wastages, steel scaffoldings made of hollow pipes are utilised for repetition work. A fall of percentage of saving in the cost of construction would be effected.

**RCC Slabs and Roofs** — The usual procedure of filling up solid RCC slabs for roofs also deserves to be changed by adopting the hollow blocks slab method. This would eliminate the entire redundant area in concrete which does not counteract any compression and also reduces the reinforcements to a minimum. This method has been used with great success in England and some other countries as well.

The rehabilitation of the low-income group of people has been thought so for mostly in terms of resettlement and low-cost housing. The effort should be concentrated on shifting people to newly designed and developed townships in which nuclei houses are built and bringing the cost of construction of these houses as low as possible. This approach, although commonly accepted in Pakistan as the only way contributory to improvement of the poor people's life, is, however, not quite so obvious. The improvement of the standard of living depends, besides availability of work and personal income, on many other factors. A large section of them is shaped by the planners,

- (1) Housing policy should be spelled out in specific terms and comprehensive legislation should be undertaken on physical planning, housing and development.
- (2) The plan should be given neighbourhood or territorial orientation. There should be a development plan for each town and these plans should be integrated with the national plan.
- (3) Master plans should be prepared for all towns. They should outline the development and should be simple and not very elaborate or technical.
- (4) For squatters without shelter, night shelters should be provided and these should be run as social welfare institutions.
- (5) Research in building techniques should be undertaken and steps should be taken to evolve cheap houses for the low-income groups. On the periphery of a town, urban villages rather than shanty towns should be created.

In the ultimate analysis, Pakistan is the sum total of houses spread throughout the length and breadth of the country. Houses are the cells that make the socio-political body known as Pakistan. For building Pakistan we must build better houses.

#### CONCLUSION

On the basis of what has been discussed in the preceding pages, it is not difficult to find out the different advantages and disadvantages of modelling future housing projects after Gulberg or Shad Bagh. When the two areas were developed, land available for housing was not only in abundance but also dirt cheap. The cost of material too offered no big problem. Cement and bricks, steel and timber, sanitary fitting and electric wiring and other accessories and other sundry goods

were easy to get and cheap to buy. But with the lapse of time, things have changed drastically. Land has not only become scarce but its price has rocketed to sky. Building material is not only in short supply, particularly steel and cement, but its cost has also multiplied manifold.

With all that in mind and taking into consideration the extreme climate that prevails in Lahore it is not feasible to build skyscrapers in the form of flats or apartment houses. The builder whether it is the Lahore Development Authority or other construction agency or the individual, will try to put up a house of which the cost is not very high and its benefit, both in short and long runs, is substantial. The cost-benefit ratio for the Lahore Development Authority in the Gulberg project was 1 : .93 and in Shad Bagh 1 : 1.79. For a private builder the ratio is slightly different. It is 1 : 1.58 in Gulberg and 1 : 1.78 in Shad Bagh. In the case of houses built by the Lahore Improvement Trust (now Lahore Development Authority) and sold out to individual buyer the ratio is 1 : 2.15.

It is, therefore, abundantly clear whether one builds a big house or a small one, the ultimate benefit is much the same. Unless one gets rid of a false sense of prestige, it is better that small rather than big houses should be built in future if the shortage of housing in the City of Lahore is to be tackled effectively. They will require less space and comparatively speaking lesser material. They can be managed more efficiently and even their annual or periodic repairs will be less costly. In addition, they will generate a feeling of equality and neighbourliness among the person who reside in them and will not produce the social isolation in which the Gulbergians pass their days. If through the good offices of the state and the efforts of private organizations and individuals, we can popularize the concept of a small house, it would be real boon to the people of all the different income groups. On technical ground, however, care should be taken to avoid the drawbacks from which the housing project in Shad Bagh suffers. Though some recommendations and suggestions have been made in this regard but in fact it lies in the sphere of a house-planning engineers rather than a student of economics to do the needful.

