On 12th July 1961, the unfinished earthen embank ent at Panshet breached in the early hours of morning and as a result a raging torrent of water swept through Poona later in the day. The face of the city and the fate of thousands of its citizens were changed beyond recognition. This study based on the field investigation during the subsequent trying times attempts to analyse how the city and its administrators faced the enormous tasks of rehabilitation and reconstruction. The city was fortunate enough to receive large amounts of assistance from within the state and beyond. But its administration and distribution left much to be desired. The manner in which the basic problem — restoration of normal water supply to the city and for irrigation purposes - was tackled, became a singular example of indecision and consequent waste. Lack of courage was again evident in dealing with the problem of development of the river

front. A housing programme was speedily launched but its impact on the total development of the city was not taken into account. The study analyzes how the nature of some of the problems has become more complicated since the disaster and stresses the need for a bold, integrated and planned approach, more particularly in solving the problem of acute scarcity of hous-

ing in the city.

## DELUGE IN POONA

Aftermath and Rehabilitation

# SULABHA BRAHME PRAKASH GOLE

## GOKHALE INSTITUTE OF POLITICS AND ECONOMIC POONA 4

#### ASIA PUBLISHING HOUSE

BOMBAY · CALCUTTA · NEW DELHI · MADRAS · LUCKNOW

BANGALORE · LONDON · NEW YORK

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Poona 4.

Published by V. M. Dandekar at the Gokhale Institute of Politics and Economics, Poona, and printed by D. V. Ambekar, Aryabhushan Press, 915/1 A Shivajinagar, Poona 4.

#### Foreword

The present publication of the Institute offers a descriptive account of the Panshet Dam disaster which overtook Poona on 12th July 1961 and the problems of relief and rehabilitation that followed in its wake. In Chapter I is briefly described the disaster: 750 residential structures were completely destroyed and 1650 were extensively damaged. About 10,000 families lost their homes, and over 26,000 families suffered losses in terms of family belongings. About 36,00 shops suffered extensive loss in terms of stocks of goods. As many as 100 institutions, public and private, were wholly or partly affected. The Poona Municipal Corporation, some of the offices of the State Government, a few banks and other bodies lost their valuable records and other papers. Food grains stored in warehouses were destroyed. The bridges and main roads in the city were extensively damaged. The telephone and electric lines were destroyed and the water storage serving the city was totally lost. The total loss is estimated to be about Rs. 175,000,000. The details are given in Chapter III.

The first and naturally the most urgent problem was that of restoring the water-supply. This is described in Chapter II. Next came the organisation of immediate relief with attendant human problems involving several thousand people and costing about Rs. 7,500,000. Once the immediate relief was organised, attention had to be given to rehabilitation, first of all, of the disrupted economic life. This was achieved mainly by loan assistance supported by some cash grants and subsidies. This required another Rs. 7,500,000. These measures are described in Chapter IV of the report.

A more difficult problem was that of providing housing to nearly 14,000 displaced families. About a third of these were able to return to their own houses and occupy them after necessary repairs. Provision of housing to the remaining naturally took time. By the end of March 1965, that is in about four years after the disaster, nearly 6,000 families were provided permanent housing through various schemes sponsored by the government and co-operative housing societies. The details of the several housing schemes appear in Chapter V. The remaining 3 or 4 thousand are presumably still living in make-shift arrangements. A number of these probably had never any permanent housing and have always lived in temporary huts erected in slums. They have returned to their permanent lot and slums have arisen in their original places.

The problem of housing and rehabilitation of the families displaced by the Panshet Dam disaster has focussed attention on the housing problem in Poona which, with the unplanned and indiscriminate growth of the city, is becoming increasingly more acute every day. In the final chapter, the authors

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have reviewed this problem. The main facts are something to be concerned about. On the basis of 1954 incomes, costs and prices, it seems that about one-third families living in Poona are incapable of paying the 'economic' rent for even 100 sq. ft. of living-area. Another one-third can pay the economic rent for a room and kitchen but housing at economic rent cannot be provided through private building effort. Thus if we suppose that the new arrivals in the city belong to more or less the same income classes as the existing population, it means that only about a third of the new families are able to secure accommodation at the prevailing market rent. Others can either cause over-crowding in the existing housing or create slums. It is to be hoped that the civic authorities will pay urgent attention to this problem before it is too late.

V. M. DANDEKAR

Gokhale Institute of Politics and Economics, Poona 4 August 15, 1967.

#### Preface

POONA CITY was receiving its water supply since eighteen seventies from a reservoir at Khadakwasla, where a masonry dam on river Mutha was built. To augment the water supply, a project of building a new dam on a tributary of river Mutha, at Panshet, 24 miles from Poona was undertaken in 1957. It was planned to complete the construction of dam in five working seasons and to impound water in 1962. However, the plans were changed subsequently and water was impounded during 1961, when the work on the dam project was not fully completed. The earthen embankment built at Panshet, collapsed on 12th July 1961.

The danger was lurking around the corner for two days prior to the actual collapse of the dam. Yet no plans or preparations were made to alert and rescue the people from the threatened areas. Even after the collapse of the Panshet dam, little official effort to minimize the losses was evident. Nearly three hours after the collapse of the dam, massive water-columns crashed into Poona city and ravaged vast areas along both the banks of the river Mutha. Losses suffered by the citizens of Poona in terms of property lost and amenities wrecked, were colossal.

The present enquiry was undertaken to study the aftermath of Panshet disaster. The city was confronted with a multitude of problems which called for a speedy solution, so as to restore the water-supply, repair the civic amenities, administer relief to the affected, and rehabilitate the homeless. It was considered important to study how these problems arising out of a calamitous situation were solved, how the people reacted to the calamity, and how the authorities faced the enormous task of administration of relief. What was their attitude towards rehabilitation? Was it viewed as a mere patchwork, or cast into the total development framework of the city? An attempt is made to examine and answer some of these questions. The study is mainly confined to an examination of the immediate aftermath of the disaster. Evaluation of the success of rehabilitation does not come under the purview of the study as this would have involved an extensive new enquiry at a later date. The present study was launched immediately after the disaster and the necessary information was collected from numerous sources. A large number of individuals and government and private agencies were approached to obtain the requisite data. Without their whole-hearted assistance and co-operation, the work would have been impossible.

We should like to record the help extended by the staff from various government offices, viz., 'Flood' and 'Supply' branches in the Poona Collectorate, the Directorate of Industries, the Public Works Department, Maharashtra

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Housing Board, Registrar of Co-opratives, and the Chief Minister's Relief Fund Committee. We are highly obliged to them for their help. Data were collected from the office of the Poona Municipal Corporation and agencies like Mahratta Chamber of Commerce and Industries, co-operative and commercial banks, Zonal Committees and a number of social and charitable institutions. We are very grateful to all these agencies for their kind co-operation. We are also indebted to a large number of individuals, businessmen, professionals and others for their co-operation. The survey of damaged houses would not have been complete without the willing co-operation of the house-owners from the affected parts of the city, and we should like to record our thanks to them. Thanks are also due to heads of educational institutions for supplying information relating to administration of relief centres.

We owe a debt of gratitude to Prof. D. R. Gadgil for his invaluable guidance during all the stages of the work. We are grateful to Mr. M. L. Chaphekar and Mr. D. A. Gadkari, for their elucidation of technical details of the Khadakwasla project. We should also like to thank our colleagues in the Gokhale Institute for their assistance in the investigation. Special mention should be made of Mr. D. P. Apte and Mrs. S. Dhavale who carefully examined the draft of the report and made valuable suggestions.

The publication of the report has been delayed due to certain unavoidabl circumstances. The work of collection of data was completed by August 1962, and the initial draft of the report was ready by the end of 1962. Most of the data presented in the report therefore relate to the position as at the end of July 1962. Information is brought up to date only in the case of certain important issues.

SULABHA BRAHME PRAKASH GOLE

Gokhale Institute of Politics and Economics, Poona 4 July 12, 1966

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Map II Poona Municipal Corporation Area

Map III Poona City: Affected Area

#### APPENDIX 'A'

#### A NOTE ON REGISTRATION OF AFFECTED FAMILIES

To ensure proper and systematic distribution of aid to the affected families a comprehensive register of all these families was necessary. However, no attempt was made for preparing such a list in the initial stages. Ration was distributed with very nominal checking; the checking was better at some centres and almost absent at others. At the time of distribution of cash doles cursory attempt was made to prepare a list of the affected families. However, the work was carried out with the help of inexperienced volunteers and was not properly guided or supervised, with the result that a proper list was not prepared before the distribution of cash dole. It was, therefore, not possible to ensure that the relief reached only the affected families. In fact, the government was pressed hard to prepare identification cards before distribution of cash or other help, or at least simultaneously with the distribution. Assistance was also offered for undertaking this work. Nevertheless the authorities scarcely paid any attention to the problem at that time. It was only at the end of August that the government entrusted the Bureau of Economics and Statistics, Government of Maharashtra, with the work of preparing family cards. The purpose of issuing identity cards was to facilitate aid distribution. However, as the cards were issued after a major part of aid distribution was over, they proved to be of little value.

#### The Procedure of registration:-

About 52 senior clerks, drawn from all over the state, were employed to carry out the work of listing the affected families. They were given initial training. Three Mamlatdars were appointed to supervise the work. The overall supervision vested with the officers of the Bureau. The affected people were requested to register their names and addresses, past and present, at the zonal committee offices. The information given by the affected families was recorded on slips. The senior clerks moved in different parts of the city to visit the affected families at their post-disaster addresses recorded on the slips and obtained information about the family composition and the amount of aid received by the family. This information was recorded on a prescribed form.

The work of registration and recording information on slips was taken up in the last week of August, and 14,796 families were registered between 27th and 31st August. Enquiry about the families was conducted by the senior clerks simultaneously and a large number (2149) of slips had to be cancelled as they were in duplicate or the families were found to be non-affected. Subsequently, cards were issued to 12,647 families. Registration work was taken up again for

two or four days at the end of September, at the end of October, and at the beginning of November, when 8,520, 711 and 350 families respectively registered themselves. After completing the enquiry, cards were issued to 6,784 families out of 9,581 families who registered after mid-September. In all 19,431 family cards were issued to families staying outside the relief centres. In addition to these, in September 6,732 cards were issued to families staying at the relief centres, and additional 101 cards were issued at relief centres in November 1961. Thus the total number of cards issued was 26,264 (19,431 + 6,833).

The families were considered as affected if the address entered by them on the slip as their place of residence prior to 12th July was found in the list of affected houses. No use was made of the information obtained previously through cash-dole forms and ration forms. The aid amounts received through government and other sources were also recorded in the cards. These amounts were taken verbatim from families themselves and were not verified or checked. A random survey of affected houses was carried out to verify whether the house-number reported was really affected and whether the family in question was staying in the affected part of the house. In the case of families living in huts in the slum area, spot verification was not carried out. It was reported that in some cases, the senior clerks filled in family cards on the basis of information available on slips.

Thus the system of listing the families followed by government left several loop-holes. It was easy for the unaffected families to obtain help by notifying false addresses as checking at the past address was cursory. Later on each applicant was required to obtain a certificate from Corporators so as to avoid help going to unaffected families. Malpractices were reported even in bestowing these certificates. The officials in charge of the distribution of aid reported that about 12 to 15 per cent of the total aid-receiving families might have received aid through false information, corruption, etc. Government decided to recover the amount in such spurious cases. The amount was recovered in about 100 cases

The Gokhale Institute of Politics and Economics collected comprehensive information about the affected families. A complete list of the families who stayed at relief centres, and those who took meals at kitchen centre was prepared by visiting all these centres. In addition a list of families who stayed outside the relief centre and obtained cash doles was made. All this information was checked by the investigators from the Institute at the time of the survey of damaged houses.

It was possible to check 13,000 forms of the families obtaining cash dole and it was found that in 35 cases the family had left the place prior to July 1961 and was not living in the affected house at the time of the disaster; 175 families lived in the unaffected part of the house; about 375 families were found to be not residing at the address given by them and were probably spurious cases.

In 250 cases, the pre-disaster address was incomplete and in another 150 cases the address could not be traced. In about 170 cases water level was so low as to have inflicted no damage, and 265 cases were detected where there was duplication. Thus, out of about 13,000 cases which could be scrutinized, about 1,200 or nine per cent were suspicious cases. It was not possible to check the information for about 3,000 families.

Information regarding all the families (except the hutment dwellers) taking resort to relief centres was also checked. In 250 cases the address could not be traced, as information about address was incomplete or wrong. In 210 cases the families could not be traced at the reported address. Forty-one families had left the affected house prior to 12th July and 18 families were from the unaffected part of the affected house. On the basis of above checks the proportion of unaffected families in the total families receiving aid worked to about 10 per cent. This means about 2,600 families managed to take undue advantage of the relief schemes.

An estimate of the affected families was made on the basis of information collected from the survey of damaged houses and the information about families from submerged houses. The estimated number of total affected families was 26,250. However, some of the affected families did not apply for aid. The number of families receiving aid was about 26,500. Of these about 24,000 were actually affected. The proportion of families who did not take aid works to about 10 per cent among the total affected families.

#### APPENDIX B

#### Questionnaire 1

#### SURVEY OF RELIEF CENTRES ORGANIZED FOR THE AFFECTED PEOPLE

- 1. Name of the Institution where the Relief Centre was located:
- 2. Address:
- 3. Date of opening the Centre:
- 4. Date of closing the Centre:
- 5. Management of the Centre: Supervisors: Assistants: Number of persons:
- 6. No. of persons at the Centre in the beginning:

  Male Female Total
- 7. Changes in the number of inmates residing at the Centre over the total duration of the Centre:
- 8. Provision of food at the Centre:

Meals Tea Snacks Milk Biscuits Others No. of times served:

- 9. No. of rooms and halls used for accommodating the affected people:
- 10. Type of arrangements made for drinking-water, bathing, washing and latrine at the Centre:
- 11. Which part of the city and which social class were principally represented among affected people staying at the Centre:
- 12. Were the inmates asked to work at the Centre? Which tasks were given to them?
- 13. What type of work was entrusted to paid servants? How many servants were employed for these tasks? What was the rate of payment?
- 14. Total number of meals served at the Centre:
  Total expenditure on meals:
- 15. Total expenditure involved for purchases of groceries:
- 16. What were the other items of expenditure? How much was spent on them?

- 17. Which were the articles supplied by the Government? Ouantity:
  - Approximate price:
- 18. Amount of cash advance given by the government for meeting the expenses of the centre:
- 19. Were donations in cash or in kind received from private institutions or citizens? Of what type? From whom? Their approximate quantity and value.
- 20. Which were the articles supplied by the government for distributing at the centre? Their approximate quantity and value.
- 21. How the persons were selected in distributing these articles?
  - (i) Type of articles distributed:
  - (ii) No. of persons receiving:
- 22. What was the expenditure involved in cleaning the buildings and premises? How was it met?
- 23. Difficulties encountered in administering the Centre:

#### Ouestionnaire 2

#### SURVEY OF INSTITUTIONS RENDERING ASSISTANCE TO THE AFFECTED **FAMILIES**

- 1. Name of the Institution:
- 2. Type of assistance given:
- 3. Number of families helped:
- 4. The quantity and amount of assistance:
- 5. The method of selecting the families for giving assistance.
- 6. Sources from where cash and other articles were collected for distribution:
- 7. Estimate of total assistance rendered:
- 8. Period of distribution of aid:
- 9. Agency of distribution and procedure of distribution:
- 10. Remarks:

#### Questionnaire 3

#### SURVEY OF DAMAGED HOUSES

- 1. House Number and Ward:
- 2. Name of House-owner:
- 3. Condition of the House:
  (According to Corporation's Classification)
- 4. (i) Total No. of rooms in the house:
  - (ii) No. of rooms damaged:
  - (iii) No. of rooms repaired:
- 5. Name of the informant:
- 6. Status of the informant : House owner/member of the house-owner's family/tenant
- 7. Information about tenants residing in the house before and after the calamity.
  - ( i ) Names of tenants living before the calamity
  - (ii) No. of rooms held before the calamity
  - (iii) Present place of residence
  - (iv) If in the same house, number of rooms rented in
  - (v) Whether resorted to relief centre immediately after the disaster. If not, what were the arrangements made?
  - (vi) Whether applied for accommodation to a co-operative housing society or any other agency?
- 8. Information about new tenants who came to stay in the house after the calamity
  - (i) Name
  - (ii) Previous address
  - (iii) No. of rooms rented in presently
  - (iv) Whether affected
- 9. Remarks:

Table 5.12: Accommodation provided for dishoused families under the state government schemes up to august 1962

Tune of	Total No. of tenements ready for occupation	No. of tenements actually occupied	Families shifted from						
Type of accommodation			Round hut	Mandap	Plinth	. Dormitory	Relief centre	Other places	
Dormitory tenements	1988	1961	1	245		_	1463	252	
Plinth tenements	1420	1404	89	1258		_	•	57	
Round hut	388	374	165	209	_	<b>_</b> .	_	_	
Nissen hut	198	196		-		2	<del></del>	194	
Tenements under Slum clearance scheme	1104	855	91	475	5	175		109	
Low-income- group housing scheme	310	140	_	_	_	_	· <b></b>	140	
Subsidized indus- trial housing scheme	132	31		1	_	_	_	30	

#### Errata

Page	Line	In place of	Read
6	Footnote 3	p. 325	p. 326
15	2nd line from the bottom	Railway	Railways
20	Table 3.3, Col. 7	10,000	1,00,000
22	Para 6, line 1	papers	paper
44	Table 3.27, Col. 1, heading	Crop realign	Crop
44	Table 3.27, Col. 4, Total	5,47,700	5,47,000
54	Table 4.3, Col. 9, line 1		6
57	Table 4.5, Col. 2, line 5	1	2
57	Table 4. 5, Col. 3, line 5	5	6
57	Table 4.5, Col. 6, line 5	9	11
59	Para 6, last line	Table 8	Table 4.8
104	Para 2, last line	25	250
125	Table 7.5, Col. 1, line 10	2490	2499
132	Para 2, line 3	implementaion	implementation

For Table 5.12 see p. 145