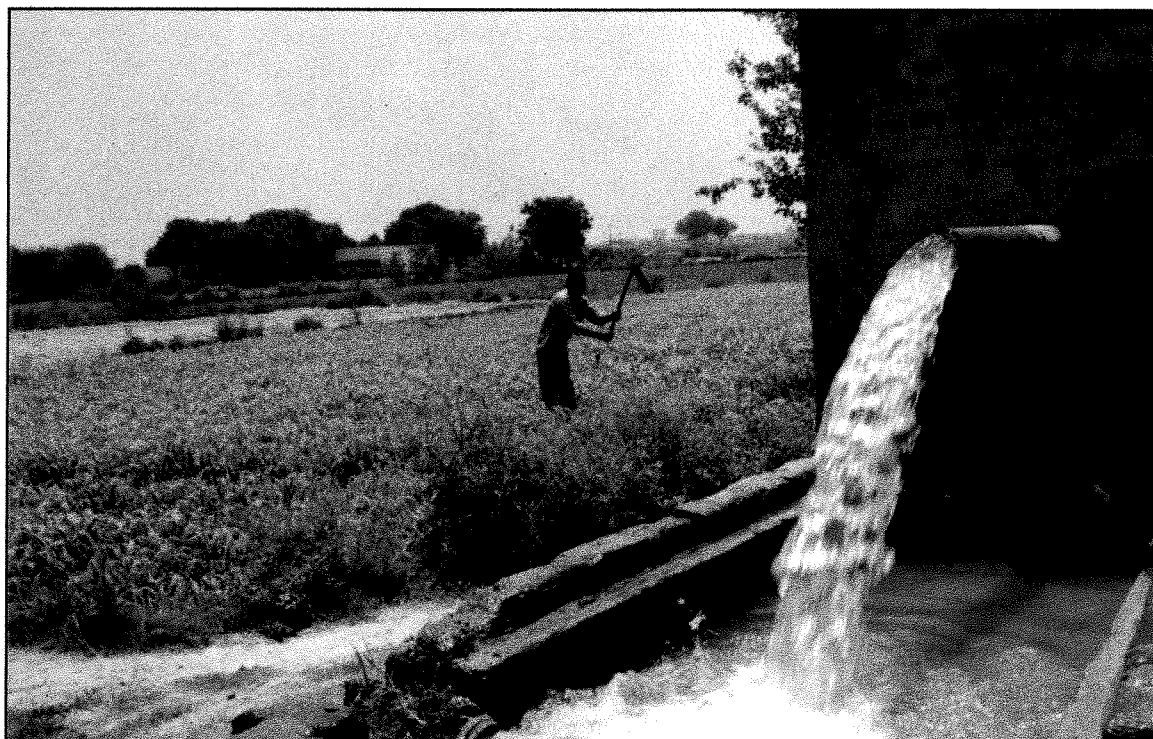


**REPORT
ON
CENSUS OF MINOR
IRRIGATION SCHEMES
1993-94**

PART-I



**GOVERNMENT OF INDIA
MINISTRY OF WATER RESOURCES
MINOR IRRIGATION DIVISION**

NEW DELHI

March 2001



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MINISTRY OF WATER RESOURCES
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March 2001



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March 26, 2001

FOREWORD

Minor Irrigation Schemes have played a key role in the past in ushering the green revolution in the country. It would continue to play a prominent role in the future also. Accurate and authentic database is essential for planning and implementation of projects. The first attempt to build up database for Minor Irrigation Sector was made in 1986-87, when the first census of Minor Irrigation Projects was conducted throughout the country except Rajasthan. The present publication "Census of Minor Irrigation Schemes 1993-94" is an attempt to update that database. The report is primarily structured around the census carried out by 21 States and 4 Union Territories (UTs) except the States of Gujarat, Karnataka, Maharashtra, Tamil Nadu and UTs of Chandigarh, Daman and Diu and Lakshdweep under the centrally sponsored scheme "Rationalisation of Minor Irrigation Statistics (RMIS)". Under this scheme, cent percent central assistance was given to the States/UTs for conducting the Minor Irrigation Census. Besides the census profile, the compilation carries district-wise analysis done by the Minor Irrigation Division of the Ministry of Water Resources.

The officers of the State and Union Territories as also of the Central Government are to be congratulated for the tremendous amount of work done and contributions made to make the project a success. The National Informatics Centre unit attached to the Ministry of Water Resources had helped in the computerisation of census data. Their contribution is thankfully acknowledged. This publication would prove useful not only to the professionals, planners and researchers in irrigation and agriculture sectors but also to all others who are directly or indirectly connected with the development of irrigation in India.


(Z. Hasan)

PROLOGUE

Water is an important input for proper crop growth. Especially under the arid and semi arid areas irrigation has an added importance. Though Major and Medium Irrigation projects provide irrigation to larger areas, yet they have a long gestation period, requiring heavy investments, apart from other limitations. On the other hand, Minor Irrigation Schemes have shorter gestation periods and also can be taken up with considerably low investments. Moreover, ground water schemes provide irrigation throughout the year and, are more dependable for sustaining agricultural production over the years.

Most of the minor irrigation projects are being executed and maintained by farmers. The irrigation projects including, those projects which were undertaken by the Government, while suffer from several problems of maintenance, they are also either underused or disused altogether. The actual position can be known properly only if the database of all such Minor Irrigation Projects is available.

Efforts have been made in the past by Government of India for building up such a database in the States and the Union Territories. The First Minor Irrigation Census was carried out with Reference Year 1986-87 and, the Census Report was published during November 1993. In order to update the database, the Second Census of Minor Irrigation projects was carried out under the "Rationalisation of Minor Irrigation Statistics Scheme" with Reference Year 1993-94. This census covers tremendous amount of data on Minor Irrigation Schemes, which can be used for further planning to strengthen the Irrigation Sector in general, and the Minor Irrigation Sector in particular.

The data collected in the Second Census cover all ground water and surface water Minor Irrigation Schemes of the country and the Census Report provides district-wise and scheme-wise information in respect of 21 States and 4 Union Territories except for the States of Gujarat, Karnataka, Maharashtra, Tamil Nadu and the Union Territories of Chandigarh, Daman and Diu and Lakshadweep. The Report also brings out the data on Minor Irrigation Projects that are out of use. Naturally, this should come as a concern to all Planners and Administrators. I hope the data given in this Report would be of immense help to all those who are concerned with the development of the Minor Irrigation Sector.



(PALAT MOHANDAS)
Additional Secretary
Ministry of Water Resources
Government of India

Place : New Delhi
Date : March 2001

PREFACE

Minor irrigation development programmes play an important role in increasing agricultural production to meet the needs of growing population. In the States these schemes having culturable command area upto 2000 hectare are being implemented by many departments/organisations like Agriculture, Rural Development, Irrigation, Social Welfare, etc. At the Central level also, a number of departments have been implementing schemes having minor irrigation component. The Ministry of Rural Areas and Employment launched a Million Wells Scheme (MWS) in 1988-89. Till 1997-98, a total of 12,63,090 wells were constructed under MWS with an expenditure of about Rs. 4700 crore. Drought Prone Area Programme (DPAP) on watershed basis is another important scheme being implemented by the Government. The Ministry of Agriculture have been instrumental in providing credit to farmers for the development of minor irrigation through Commercial Banks, Regional Rural Banks, Co-operatives and National Bank for Agriculture & Rural Development (NABARD). Ministry of Water Resources also promote development of ground water structures, sprinkler and drip irrigation system through subsidy to small and marginal farmers under the centrally sponsored Command Area Development Programme. The Minor Irrigation Division of the Ministry of Water Resources is also implementing the Centrally Sponsored Scheme "Rationalisation of Minor Irrigation Statistics (RMIS)". Under this scheme 100% cost of statistical Cells is provided to the State/Union Territory Governments by the Ministry of Water Resources. These Cells monitor the progress of development of irrigation through Minor Irrigation Schemes on quarterly basis and conduct census of minor irrigation structures on quinquennial basis, do sample survey of Minor Irrigation schemes went into disuse between two Censuses and reasons there of.

The Ministry also assist the State Governments in preparation of schemes for posing to external funding agencies for attracting external assistance for minor irrigation schemes. So far as Ground water development is concerned it is primarily done through individual and co-operative efforts of the farmers with the help of institutional finance and their own savings. Surface water minor irrigation schemes i.e. surface lift schemes and surface flow schemes are generally funded from the public sector outlay. NABARD provides finance to the banks for taking up the minor irrigation schemes in the States and Union Territories. In addition, the Land Development Banks provide credit to the farmers under their normal programmes also.

The need of carrying out Census of Minor Irrigation schemes have been felt on account of many reasons. Many old schemes have gone out of use due to one reason or the other. The irrigation potential created and utilised through ground water as well as surface water minor irrigation schemes are not being recorded systematically in most cases as these schemes are implemented and monitored by individual farmers. Further, the norms being adopted for assessing the irrigation potential of minor irrigation schemes are also not uniform. It was therefore, considered essential to carry out a census of minor irrigation schemes to have a sound database for further planning purposes.

The first census of minor irrigation works with reference year 1986-87 was conducted in all the States/UTs, except Rajasthan and the census report was published in November, 1993. This is the second census report with reference year 1993-94.

To conduct the census work, the Head of the nodal department was declared as Minor Irrigation Census Commissioner and was made responsible for conducting the entire census operation. The primary work of collection of data was carried out by Village Level Workers (VLWs)/Patwaries/Village Accountants etc. at the village level. Their work was supervised by Block Development Officers (BDO)/Tehsildars and was reviewed by District Level Officers. Training-cum-workshops were organised for explaining schedules/formats/procedures and instructions to the primary enumerators and supervisors, by the Minor Irrigation Census Commissioners at the State headquarters, while District Level Officers conducted such workshops at the district headquarters.

A two-day workshop attended by Minor Irrigation Census Commissioners of the States and their representatives was organised by the Ministry of Water Resources in collaboration with National Informatics Centre (NIC) in October, 1995. These data so generated through Census have now been computerised with the help of computer facilities available in the Ministry of Water Resources and necessary software developed by NIC which are presented in this report. This Report on minor irrigation census (1993-94) is being presented in following six parts:

Part-I: It gives the historical background, the methodology adopted for census operation, salient features, limitations, miscellaneous tables, data contained in the village schedule along with various statistical charts based on census data in respect of each State/UT and detailed Statistical tables giving State-wise Census data on various types of M. I. works.

Part-II: It gives District-wise Statistical Tables on Dug-wells.

Part-III: It gives District-wise Statistical Tables on Shallow Tube-wells.

Part-IV: It gives District-wise Statistical Tables on Deep Tube-wells;

Part-V: It gives District-wise Statistical Tables on Surface Flow Irrigation Schemes;

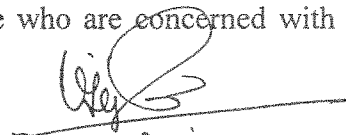
Part-VI: It gives District-wise Statistical Tables on Surface Lift Irrigation Schemes, census data contained in the village schedule & District-wise details of number of various types of minor irrigation works.

The report covers information in respect of 21 States and 4 Union Territories (UTs). Information in respect of States of Gujarat, Karnataka, Maharashtra, Tamilnadu and UTs of Chandigarh, Daman and Diu and Lakshadweep is not covered in the report due to various reasons. The census work was originally proposed to be completed by August 1995, but due to initial difficulties in nominating the enumerating agencies by the States/UTs, and the involvement of officials in preparation of voters identity cards, elections, etc. along with various administrative difficulties and other problems, most of the States could not complete the work within the stipulated time. The implementation of the scheme, therefore, had to be extended on a year to year basis up to 1999-2000. Even then, the State governments of Gujarat and Maharashtra have not been able to complete the census work, the information in respect of some districts of Tamilnadu was found to be incorrect and the Government of Karnataka though completed the census work yet the scrutiny of data revealed that there are discrepancies in the data. Hence the census report contains the Census data in respect of only 21 States and 4 UTs.

The report in this form could be possible on account of able and regular guidance of Secretary (WR) and Additional Secretary (WR). I express my gratitude to them. I do express my sincere thanks to Dr. D. K. Chadha, Chairman, CGWB, Dr. S. K. Sharma and Dr. S. P. Sinha Ray both Members, CGWB for the help rendered by them in finalising this report.

In the end, I may like to state that this gigantic work could have not been completed but for the strenuous efforts made by Shri O. P. Misra, Director (Stat.) and Shri Khazan Singh, Senior Evaluation Officer of the Ministry. Miss Chandrakala, Assistant Engineer (Stat.), Smt. Kanika Pandya, P.A., Sh. M.C. Das, Sr. Computer and Mrs. Mukta, UDC of Minor Irrigation Wing and Dr. Kishor Kumar, Director (Technical), and Shri A. K. Gupta, Senior Analyst of National Informatic Centre also helped in compilation, analysis and publication of this Report. I wish to place on record my sincere appreciation for the work done by them.

I hope this publication would be useful to all those who are concerned with the subject.



(Dr. V. S. Dinkar)
Commissioner (CAD)
Ministry of Water Resources

Place: New Delhi
Dated: March 2001

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PART-I
CHAPTERS

CHAPTER 1

HISTORICAL BACKGROUND

1.1 INTRODUCTION

1.1.1 Water is a precious national resource. The development of surface as well as ground water for increasing the agricultural production to meet the growing requirement of Indian population is a must. Despite large scale of industrialisation during the plan periods more and more emphasis has been given on increasing agricultural production. It is essential to mobilise all efforts to maximise the productivity of agricultural land. One of the major impediments of full exploitation of the possibility of intensive agriculture is the lack of assured and dependable water supply throughout the year. The average yield is usually low with high fluctuations from year to year. The rainfall in large parts of the cropped area is low and uncertain in its distribution. Therefore, there is a strong need for irrigation.

1.1.2 The area under irrigation has increased substantially during the post independence period and construction of a large number of major, medium and minor irrigation projects have contributed to this to a large extent. The minor irrigation schemes provide the farmers with controlled and timely irrigation which the new high yielding varieties of seeds demand. These schemes are labour intensive, quick maturing and do not require heavy investments for their installation. As a part of various development programmes, innumerable new schemes are being taken up in the States/UTs. Some of the already completed schemes in the States might have gone out of use due to one reason or the other. As the surface water projects alone are not able to meet the full demand of water, farmers have installed wells and tube-wells in their command area to provide supplementary irrigation. The potential created by such minor irrigation schemes is not being accounted for separately.

1.1.3 A detailed census of minor irrigation works was first recommended by a sub-committee on irrigation statistics set up by the Planning Commission in 1970. The National Commission on Agriculture which examined in detail the present status of minor irrigation in India observed that although many State governments publish some information on the principal irrigation sources namely wells, tube wells, tanks, etc. in their agricultural statistics reports, no complete information is available on all India basis. The National Commission on Agriculture had recommended that a census of irrigation sources be undertaken along with the Agricultural Census once in five years. Special irrigation surveys on the number of works and their utilisation might be undertaken by the States. The Technical Committee on Agricultural Census 1980-81 discussed the list of items in respect of data relating to minor irrigation proposed to be collected along with the agricultural census in 1980-81. It was viewed that the agricultural census data are being compiled from the existing land records in various States and the information as required do not figure in the land records, and it would not be possible to collect this information through the main agricultural census. Subsequently, in a meeting taken by the Additional Secretary (Agriculture) it was decided to include certain information on irrigation in in-put survey for each holding on sample basis.

1.1.4 The scheme for Improvement of Irrigation Statistics was taken up as a sequel to the recommendations of an inter-ministerial Committee under the aegis of Planning Commission which considered the availability of statistics relating to minor irrigation projects. The committee highlighted the need for undertaking a detailed census of minor irrigation projects on a quinquennial basis. The scheme of Improvement of Irrigation Statistics was launched in 1980-81 by the Department of Agriculture. Although census of minor irrigation works was to be taken up under this scheme, it could not be conducted till 1985-86. While discussing various issues and problems in the irrigation sector in the Planning Commission in 1986, it was stressed that census of minor irrigation schemes be conducted within a period of one year. During the discussions of annual plan proposals of the States hardly any of the States could give a clear picture of the development of minor irrigation in their State. Lack of a sound database for minor irrigation sector was felt as a bare necessity at every forum of planning. It was, therefore, necessary to conduct a census of minor irrigation works in the country. Accordingly, the first census of minor irrigation schemes was conducted in all the States/UTs with reference year 1986-87 and the All India Census report was published in November, 1993. The first minor irrigation census could not be conducted in Rajasthan due to non-cooperation of Patwaries. The census provided detailed information giving State wise / district wise number of schemes, culturable command area, potential created, potential utilised, etc. in respect of each type of minor irrigation scheme, namely dug wells, shallow tube wells, deep tube wells, surface flow and surface lift schemes.

1.2 DEFINITION OF MINOR IRRIGATION SCHEMES

1.2.1 The criteria for classification of minor irrigation schemes have been changing from time to time. Since April 1993 all ground water schemes and surface water schemes (both flow and lift) having culturable command area upto 2000 hectares individually are considered as minor irrigation schemes.

1.3 TYPES OF MINOR IRRIGATION WORKS

1.3.1 Ground water schemes comprise of dug wells, deepening of dug wells, dug-cum-bore wells, borings, private shallow tubewells, filter points and deep tubewells. The command area of private ground water schemes varies from 1 to 5 hectares. The State Governments provide assistance in installation of such schemes which confines mainly to technical guidance, custom service for boring and arrangements for credit facilities at reasonable rates of interest. The subsidies are also made available for installation of these schemes to weaker sections of farmers. The construction, operation and maintenance of these schemes are done by the farmers themselves. The deep tubewells which extend up to the depth of 200 metres or more are designed to give a discharge of 100 to 200 cubic metres per hour. These schemes are beyond the means of individual farmers and their construction, operation and maintenance are done by the State Government departments or corporations.

1.3.2 The surface water schemes comprise of surface flow schemes and surface lift irrigation schemes. The surface flow schemes are the tanks, check dams, diversion

channels which are sometimes built as temporary structures and in other case are of permanent nature. The diversion channels are generally prevalent in hilly regions. The norms of these schemes vary from State to State. These schemes are known as Kuhl in Jammu & Kashmir and Himachal Pradesh, Gul in Uttar Pradesh, Aharas and Pynes in Bihar and low Khones and Dongs in north-eastern region. The small storage tanks are owned by community or local bodies and generally have command areas up to 40 hectares. The large storage tanks alongwith the distribution system having command area varying from 40 to 2000 hectares are constructed by State Government Department.

1.4 SOURCES OF DATA

1.4.1 The main sources of minor irrigation statistical data were (i) Land Use Statistics (LUS), (ii) Periodical Progress Reports from State Government Departments, (iii) Annual Administrative Report compiled by the State Government Departments (iv) Ad hoc reports prepared by various agencies from time to time on the basis of sample survey to access the performance of minor irrigation works.

Land Use Statistics

1.4.2 The information on area irrigated is an ancillary product from the Land Use Statistics. The net area irrigated by the government canals, private canals, tanks, tube wells, other wells and other sources are compiled for village/tehsil/district and the State level. Similarly, area irrigated more than once under different crops are also compiled. The Directorate of Economics and Statistics, Ministry of Agriculture, Government of India publishes regularly the national level information with time lag of about 3 to 4 years. The primary data for LUS are collected by village patwaris in prescribed forms by plot to plot enumeration in certain States and are estimated on the basis of sample surveys in other States. The basic enumeration forms are not the same in the States and the instructions for obtaining details of area under irrigation and its sources are inadequate. In a few States, no separate columns for the sources of irrigation have been provided in the prescribed Khasra forms. In certain States conventionally the sources of irrigation and cropwise entries of irrigated area are also entered without a specific column which results in classificatory errors.

1.4.3 Classification of sources of irrigation does not provide data on irrigated area by important sources like private tubewells, dugwells, deep tubewells, diversion schemes and surface lift irrigation schemes. The gross irrigated areas according to different sources in most of the States are also not being compiled in LUS. In case of cropped area irrigated by two different sources, say canal and well, it is recorded under canal only. The Patwaris who are primarily responsible for data collection generally are not able to devote enough time required for collection of LUS data. Data are also based on sample surveys and ad hoc assessments in of certain areas which introduces limitations in its reliability. Besides, the LUS data do not give information on the number of minor irrigation structures.

Periodical Progress Reports

1.4.4 Minor irrigation programs in the States are dealt by different departments under different development sectors. The progress reports relating to minor irrigation programs received from different departments at the Centre are used for compilation of minor irrigation data for the State. There has not been a single nodal department in the State to compile the minor irrigation statistics for the entire State. The structures installed by the farmers from their own efforts are generally not recorded. The irrigation potential of groundwater schemes is usually reported on the basis of certain assumed yardsticks. Usually no efforts have been made at the State level to provide a scientific basis for such yardsticks. In case of State irrigation works the irrigation potential and utilisation are usually estimated on the basis of such assumed duties/water allowances. The reported figures of irrigation potential created by certain schemes during a particular period might have been reduced over a period of time but no depreciation etc, has been taken into account in reporting the figures of cumulative irrigation potential created. The figures in respect of private minor irrigation works installed totally by the efforts of the farmers are usually not based on any positive enumeration or sample survey. However, the main source is figures indicated by States/UTs during annual plan discussions.

Annual Administrative Report

1.4.5 In certain States there are no field agencies in the minor irrigation department to collect data relating to minor irrigation programs for their annual administrative reports. Further since minor irrigation program is dealt by more than one department of the State, the annual administrative report of irrigation department gives the statistics pertaining to works maintained by that department only.

Ad hoc Reports

1.4.6 The *ad-hoc* surveys are sometimes intended to throw light upon the socio-economic impact in certain areas for improving agricultural activities etc. The data collected on irrigation works under such surveys have a definite purpose and accordingly the priorities and weightage given to irrigation data for such minor irrigation statistics suffer from several deficiencies between the sets of progressive figures compiled on the basis of these statistics.

CHAPTER 2

METHODOLOGY FOR MINOR IRRIGATION CENSUS

2.1 BACKGROUND

2.1.1 For effective implementation of irrigation policy and planning, sound database regarding Minor Irrigation Sector is a must. The inadequacy of data has been considered as a serious constraint at various forums of irrigation planning. The National Commission on Agriculture had recommended that “Census of irrigation sources should be undertaken alongwith the agricultural census once in 5 years, Special irrigation surveys on the number of wells and their utilisation may be undertaken by the States” (recommendation 24/page 141 Volume-XIV). Planning Commission also recommended for a detailed census of minor irrigation works in 1970. A meeting of the Technical Committee for agriculture census 1980-81 considered the inclusion of list of items relating to minor irrigation in the primary enumeration schedules, but it could not be agreed. The main reason for non-inclusion of items relating to minor irrigation was that the agriculture census data was to be compiled from the existing data of land records of various States. The data do not have the information relating to minor irrigation works as desired.

2.2 DEPARTMENTS/ORGANISATIONS DEALING WITH MINOR IRRIGATION PROGRAMME

2.2.1 Installation of minor irrigation works in the States is being taken up by various departments and organisations under different developmental sectors. Generally dugwells, shallow tubewells and pump-sets are installed by individual farmers. Ministry of Agriculture, Government of India is operating a centrally sponsored scheme of assistance to small and marginal farmers for increasing agriculture production under which 70 percent of the outlay has been earmarked for minor irrigation works. It covers gully plugging, nala bunding, construction of small surface storage structures including ponds, tanks, deepening of village ponds, percolation tanks, dugwells, shallow tubewells, filter points, boring and deepening of wells, renovation of old wells, rahat, pump-set with appropriate water conveyance and distribution systems, pump houses, etc. The plugging cross-bunding of natural streams, nalas, rivulets, gullies and water harvesting structures are also covered under minor irrigation.

2.2.2 Under rural development programme, the minor irrigation works are installed with a view to raise the standard of living of rural people. Since these schemes are quick maturing and rural employment oriented, more and more emphasis is being given for lifting up the poor people above the poverty line. The Department of Rural Development, Government of India is operating a centrally sponsored scheme titled “Integrated Rural Development Programme” (IRDP) under which subsidies are being made available to the farmers for installation of minor irrigation works. The renovation of tanks and construction of ponds/tanks, gully, plugging and nala bunding, etc. are also taken up under various employment generation programmes such as Jawahar Rozgar Yojna Employment Assurance Scheme. The Million Wells Scheme helps the beneficiaries to acquire asset for their sustained self employment on land based activities. Under the Drought Prone Area Programme, which is operative in 947 blocks of 155 districts in 13 States, about 7.45 lakh square kilometre of area is being benefited. Similarly, under Social Welfare Programme minor irrigation works are installed as a component of Tribal Development Programme.

2.3 CENSUS OF MINOR IRRIGATION WORKS

2.3.1 The finance for private minor irrigation works flow as subsidy from the government departments and loans from banks. The monitoring of the programmes by different departments

does not consider the minor irrigation schemes separately and there is no single department in the State for compiling the minor irrigation data for the entire State. It results into incomplete compilation of data. Based on the objectives of various programmes, monitoring is not given due importance for the generation and compilation of minor irrigation data. A separate department such as minor irrigation has to keep a close coordination with all such departments for compilation of minor irrigation data which was lacking in almost all the States/UTs. The Minor Irrigation Division of the Ministry of Water Resources and the Planning Commission, Government of India compile data on minor irrigation through annual plan discussions in Planning Commission. Due to the lack of the generation of data, a firm database was not available for minor irrigation sector. Keeping this in view, the scheme Rationalisation of Minor Irrigation Statistics (RMIS), funded by the Centre was launched in 1987-88. One of the objectives of the scheme was to conduct census of minor irrigation works on quinquennial basis. Under the scheme, statistical cells consisting of requisite number of staff were also proposed to be created in each State/UT for compilation of minor irrigation statistics. Up to 1998-99, only 21 States/UTs implemented this scheme and appointed staff for the purpose. These statistical cells are collecting data relating to number of minor irrigation schemes constructed and potential created/ utilised through these schemes and communicated to the Ministry of Water Resources. Efforts are being made to set up such cells in the remaining States/UTs also.

2.3.2 The first census with reference to 1986-87 was conducted by all the States/UTs, except Rajasthan and the all India census report published in November, 1993. The second census has been delayed for few years and has been taken up with reference to 1993-94. This is a step ahead in preparation of a sound database for minor irrigation sector. In consultation with the State Governments and the concerned central organisations slight modifications have been introduced over the previous census. The additional important information on area actually being irrigated by major and medium schemes, saline/alkaline area and water logged area at village level in the village schedule has also been collected. The information in respect of adoption of newly developed and technologically advanced water and energy conserving devices such as sprinkler and drip irrigation systems and use of non-conventional energy sources such as solar pumps and wind mills have also been obtained.

2.4 FORMULATION OF PROPOSAL FOR CENTRAL GRANT-IN-AID

2.4.1 The Chief Secretaries of the States were requested by the Ministry of Water Resources to declare the Head of the nodal department as Minor Irrigation Census Commissioner. They were also requested to submit their proposal for Central grant to conduct the second census under the aegis of the centrally sponsored scheme of Rationalisation of Minor Irrigation Statistics.

2.4.2 Cost Estimates

It is proposed to pay an honorarium as a token of appreciation of work entrusted to various officials in addition to their normal duties and not as compensation or re-numeration for additional work. An honorarium of Rs. 2000/- each to the Minor Irrigation Census Commissioner in case of major States, and Rs. 1500/- each for others (namely Arunachal Pradesh, Nagaland, Manipur, Meghalaya, Mizoram, Sikkim, Tripura etc. and Union Territories, was paid. The District Level Officer in charge of Census was paid an honorarium of Rs. 1000/- each and at the Block Level an honorarium of Rs. 500/- each was paid to the Block Level Officer. The rate of honorarium for the primary enumerator was Rs. 100/- per village. The estimated cost of contingent expenditure for printing schedules and other miscellaneous expenditure was Rs. 25/- per village. The cost of

computerisation of Census data was at the rate of Rs. 1.20 per Minor Irrigation Scheme. The entire cost for conducting the Census was born by the Centre.

2.4.3. **Time Schedule**

The time schedule for completing the Minor irrigation Census operation is as follows:-

- (i) Submission of proposal by the States - December 1994
- (ii) Training Programme - January 1995
- (iii) Field work - March 1995
- (iv) Sample check - April 1995
- (v) Computerisation of Census data - June 1995
- (vi) Submission of data floppies to the Centre - August 1995

2.5 METHODOLOGY

2.5.1 The Census data was collected through canvassing six different enumeration schedules. One of the schedules is the village schedule which was canvassed by the enumerators through enquiries from patwaries/village level workers/gram pradhans, and the revenue or land records maintained in the government records. The other five schedules were to be canvassed by enumerators through enquiries from the owners of the schemes. These five schedules relate to five different types of minor irrigation schemes. The various schedules alongwith instructions for filling up are given as annex. The fieldwork of the census was either undertaken by the nodal department itself or entrusted to some other agency which the State/UT government considered fit in respect of infrastructures available with it. However, for the entire census operation, Minor Irrigation Census Commissioner, was the pivotal point. The primary work of collection of data was carried out by the enumerators. They were village level workers or village accountants or lekhpals or patwaries or a combination of these as the case may be. The work of supervision was entrusted to the next superior officer of the field agency by the State/UT. They were Block Level Officers or Sub-Divisional Officers who in order to ensure the correctness of data recorded by an enumerator conducted frequent site visits of the schemes.

2.5.2 In order to increase the reliability of data a sample check was conducted in addition to the enumeration and supervision of data collection as mentioned above. Systematic sampling technique was adopted for 5 percent sample check at the district level. It helped in detecting under enumeration/over enumeration and hence a correction factor, wherever necessary, was applied to the main census results. The following methodology was adopted for drawing the sample.

2.5.3 The District Level Officer concerned with the census operation prepared a list of villages in alphabetical order for the district after receiving the completed schedule relating to field enumeration. The total number of villages was divided by 20 and the remainder obtained was serial number of the village first selected. Thereafter every 20th village was selected for the sample. If the remainder was zero, the villages at the 20th serial was first selected village. For example, if there were 226 villages in a district-dividing the number by 20, the remainder works out to be 6. Therefore, the first village selected for the sample would be at serial numbers 6 and thereafter every 20th village. Thus the village at serial number 6,26,46,66,86,106,126,146,166,186,206 and 226 would be included in the sample.

2.5.4 The village enumeration schedules of the selected villages was checked by the district level authority. The Heading of the schedule was marked by putting letter(s) in red ink in front of the schedule number, say, schedule A.1(S). The information obtained during the sample check was

recorded in the respective columns by red ink wherever there was a change. The data so obtained was separately computerised for finding out correction factor.

2.6 TRAINING PROGRAMME FOR DATA COLLECTION

2.6.1 Training cum workshops were organised by the Minor Irrigation Census Commissioners at the State Headquarters in which the District Level Officers participated. A representative from the Centre was invariably an Observer in such workshops. The details of the methodology adopted for the census, its procedure, concepts and definitions were discussed thoroughly and necessary clarifications were given. The instructions for filling up the primary enumeration schedules were also discussed during the workshops. In turn, the District Level Officers organised training programmes at district headquarters where the primary enumerators participated. They were explained thoroughly the instructions for filling up the primary enumeration schedules.

2.7 COMPUTERISATION OF CENSUS DATA:

2.7.1 The National Informatics Centre (NIC), Planning Commission was requested to develop necessary software for computerising the Census data. Such softwares in floppy were provided to Minor Irrigation Census Commissioners for computerising the Census data. Wherever necessary, private consultants/agencies were hired by the Minor Irrigation Census Commissioners to computerise the primary enumeration schedules, according to software provided by NIC. The work was taken up at the district headquarters to avoid transportation difficulty and misplacement of enumeration schedules. It also minimised the delays in computerisation. The validated high density floppies containing data collected during the census on primary enumeration schedules were prepared and after duly ascertaining the correctness of data two copies were passed on to the Minor Irrigation Census Commissioner at the state level. A copy of the data floppy was sent to the centre by the State Minor Irrigation Census Commissioners. Based on the primary data floppies at the State headquarters, a State Minor Irrigation Census Report was brought out for which a tabulation plan was supplied by the Centre. The census data received from the States at the Centre in floppies were utilised for compiling a National Level Minor Irrigation Census Report. The processing of the report was taken up with the help of National Informatics Centre.

2.8 CLASSIFICATION OF SCHEMES:

2.8.1 Minor irrigation schemes involving either ground water or surface water use, having culturable command area up to 2000 hectare individually fall under the category of minor irrigation schemes. For the purposes of this, these schemes were classified into five broad categories:-

(a) Dug-well: It covers ordinary open wells of varying dimension dug or sunk from the ground surface into water bearing stratum to extract water for irrigation purposes. These are broadly masonry wells, kuchcha wells and dug-cum-bore wells. All such schemes are of private nature belonging to individual cultivator.

(b) Private shallow tube-well: It consists of a bore hole built into ground with the purpose of tapping ground water from porous zones. In sedimentary formations depth of a shallow tube well does not exceed 60-70 metres. These tube wells are either cavity tube-wells or strainer tube-wells. These are usually drilled by percussion method using hand boring sets and sometimes percussion rigs. Success and popularity of the scheme depends on how cheap they are. Coir structures formed by binding coir strings over an iron frame is being used as strainer. In shallow water table areas, bamboo frames are also used. Sometimes steel pipe casing are replaced by pipes constructed by rapping bituminised gunny bags over the bamboo frame. These are called bore wells, in which bore-hole is stable without a lining in the bottom portion and a tube is inserted only

in the upper zone. The tube wells are generally operated for 6 to 8 hours during irrigation season and give yield of 100-300 cubic metre per day, which is roughly 2 to 3 times that of a dug well.

(c) Deep tube wells: It usually extends to the depth of 100 metre and more and is designed to give a discharge of 100 to 200 cubic meter per hour. The deep tubewell are drilled by rotary percussion or rotary cum percussion rigs. These tube wells operate round the clock during the irrigation season, depending upon the availability of power. Their annual out put is roughly 15 times that of an average shallow tube well and are usually constructed as public scheme which are owned and operated by government departments or corporations.

(d) Surface flow irrigation scheme: These schemes use rainwater for irrigation purposes either by storing it or by diverting it from a stream, nala or river. Some times, permanent diversions are constructed for utilising the flowing water of a stream or river. Temporary diversions are also constructed in many areas which are usually washed away during the rainy season. The small storage tanks are called ponds or bundhis which are mostly community owned. The command areas of such schemes are 20 hectares or less. The large storage tanks whose command varies from 20 to 2000 hectares are generally constructed by government departments or local bodies. These are the biggest items of surface minor irrigation works. Various types of such schemes are as follows:-

Storage schemes

Storage schemes include tanks and reservoirs which impound water of streams and rivers for irrigation purposes. After wells, tanks occupy a very important place under the minor irrigation programme. They provide nearly two-third of the total irrigation from minor sources in the states of Andhra Pradesh, Karnataka, Kerala, Maharashtra, Orissa and Tamilnadu. Tracts with undulating topography and rocky sub-strata are eminently suitable for tank irrigation. Besides, there exists scope for further construction of tanks in many areas. A large number of existing tanks in southern States have gone into disuse due to long neglect of repairs. Renovation of these tanks so as to restore the lost irrigation potential is being accorded priority under the minor irrigation programme.

The essential features of these schemes are (i) a bund or a dam which is generally of earth, but is also sometimes partly or fully masonry, (ii) anicut and feeder channels to divert water from adjoining catchments, (iii) a waste weir to dispose of surplus flood water, (iv) sluice or sluices to let out water for irrigation, and (v) conveyance and distribution system. The size of the storage is determined by the run-off expected on the basis of dependable monsoon rainfall in the catchment and by the fact whether the rainfall and cropping pattern would permit more than one filling of the tank. The best and direct method to calculate the runoff would be to gauge the stream flow at the proposed site for a number of years. However, as the observed data over a long number of years is normally not available, the run-off is computed on the basis of empirical formula found applicable from past experience for the region. When tanks are constructed in a series by bunding up the same valley at several points, some spill-over yield from the bunded catchment is also accounted for. In the gross storage provided some percentage provision is allowed for dead storage to be consumed by silting in course of time.

The irrigable command of the scheme is fixed on the basis of certain standard duties in terms of crop area irrigated per unit of water. The proposed cropping pattern is decided on the basis of past experience in the region. The flood discharge to be escaped over a waste weir is computed by empirical formula which from experience is found to generally hold good for the region. The design of the various component parts of the tank usually requires specialised engineering knowledge.

The tanks fail mainly due to two reasons: (i) silting of bed, and (ii) breach due to inadequate surplussing arrangement or bad maintenance of the bund. Renovation of derelict tanks so as to restore the lost irrigation potential is being accorded priority under the minor irrigation programme. The work of restoration generally consists of (i) strengthening or raising of bund, (ii) improving the surplussing capacity and (iii) occasional de-silting of bed. De-silting is costly but in some cases this is being rendered economical by utilising the excavated earth for reclaiming part of the previously submerged land. The work of restoration is usually carried out by the State Public Works Department. After renovation, irrigation works below a specified acreage are handed over to the panchayats for maintenance. Works having higher irrigation capacity are maintained by the Public Works Department. The new works are usually taken up as State works by the State Public Works Department.

Diversion schemes, including hilly channels

These schemes aim at providing gravity flow irrigation by mere diversion of stream water supply without creating any storage. As compared to storage schemes they are economical but their feasibility is dependent on the presence of flow in the stream at the time of actual irrigation requirements. Essentially such schemes consist of (i) an obstruction (weir) or bund constructed across the stream for raising and diverting water; the weir being called anicut in the South, bandhara in Maharashtra and Gujarat, and thingal in the Assam region, and (ii) an artificial channel, known as kuhl in the hilly areas, pyne in Chhota Nagpur and Bihar and dong and ilhowkong in the Assam region. In case of small schemes which have prominent scope in the hilly tracts and foot hill plains, the water is usually diverted by constructing temporary bunds across the streams, made up of earth, stones or even bamboos. The discharge handled being of small order, the bund on the head of the channel is not provided with any gated structure for controlling and regulating the flow. Construction of work, is, therefore, simple and cheap and can be handled to a large extent by the people themselves. However, these constructions being temporary, require frequent renovation. The bunds are liable to be washed away by every major flood. The channels also get silted up and scoured frequently. It is essential that whenever such schemes aim at diverting higher discharges, say more than 5 to 10 cusecs, or tackle streams having high intensity of flood discharge, proper regulation structures equipped with suitable types of gates are provided. Weir has to be provided with scouring sluices in order to regulate the flow of silt in the off-taking channels. The construction of masonry weir is comparatively simpler and cheaper where rocky foundation is available beneath the streambed. The design of the weir on permeable and erodable foundation is more complicated and requires specialised engineering knowledge.

The irrigation capacity of the diversion schemes is dependent on the actual flow in the stream at the time the irrigation is required. The cold weather and the hot weather flow, therefore, need to be ascertained carefully before deciding the feasibility and economics of these schemes. This is particularly important in the case of non-snowfed flashy streams that spurt to lift suddenly in the rainy season after which the discharge in them dwindles down to appreciable quantity. Some diversion schemes are also constructed as kharif or monsoon channels supplying water only during the monsoon season. Such schemes are useful for providing supplemental irrigation for paddy and preliminary watering for sowing of rabi.

In most of the hilly tracts, small irrigation channels called 'kuhls' are the only means of irrigation. These channels carry water diverted from streams by constructing temporary or pucca bunds across the streams. These channels are often constructed in hazardous hilly terrain under very

difficult conditions. To avoid seepage of water and for the sake of stability, these channels are lined in most of the reaches.

Water conservation-cum-ground-water recharging Schemes:

Under this head are included schemes which serve primarily one or more of the following purposes: (i) submerging agricultural land during monsoon for sowing post-monsoon crops, (ii) improving moisture regime of the adjoining fields down stream for raising of post-monsoon crops without irrigation and replenishing the ground water. An additional advantage of these schemes is that they help to conserve the soil. When constructed in the head water region serving catchment area of tanks down below, they serve the important purpose of retarding the silting rate of these tanks.

The system of water conservation through field embankments is peculiar to central Indian tracts and is commonly in vogue in the northern Madhya Pradesh, Bundhelkhand region of Uttar Pradesh and eastern Rajasthan. In the Bundhelkhand region, these works are popularly known as 'bundhies', which consist of earthen embankments thrown across gently sloping ground. During the rainy season, water is stored upstream and the land gets submerged. If the land slope is gradual, often large areas get submerged even by low embankments. Ordinarily, no direct irrigation is carried out and benefit is mostly due to submergence. In nearly all these areas, the soil is generally black which is retentive of moisture. After remaining submerged under water during the rainy season, the soil retains sufficient moisture to grow good rabi crops. The remaining water is let out and the submerged land released for cultivation. The other advantage of submerging land in this manner is that the first flood brings a lot of silt which acts as rich manure. By preventing free flow of water across steep gradient, the soil of the land is also conserved.

Ahars in Bihar, which store water for irrigation of paddy fields also function somewhat in a similar manner. Water is let out in October for irrigating the rice fields and the drained out fields in the bed of the ahars are cultivated with rabi crops. The head water tanks popularly in vogue in Orissa have a similar role to perform. These consist of bunds put up across slope at the head of gullies with the objective of impounding and diverting the cumulative run-off into the wider valley area down stream of the bunds by percolation, seepage and surface flow. Surface channels are provided in the flanks to carry floodwater received in excess of the storage capacity of the bunds during the monsoon season.

Percolation tanks primarily constructed for the purpose of recharging ground water are in vogue in Maharashtra, Tamilnadu, Kerala and Rajasthan.

Check-dams or rapats are in vogue in Rajasthan. They consist of bunds constructed across the streams for the purpose of retarding the surface flow and also the sub-surface flow to some extent by making the bed slope of the stream flattened. This results in increased percolation of water in the sub-soil with consequent increase of the ground water supply.

In the case of big embankments impounding large catchments, it is essential that adequate arrangements are made at one or both the flanks or at some other suitable location for passing the floodwater. If no such provision is made, the embankments are liable to be breached.

(e) Surface Lift Irrigation Scheme: In regions where the topography does not permit direct flow irrigation from rivers and streams, water has to be lifted into the irrigation channels. These works are similar to diversion schemes, but in addition pumps are installed and pump houses constructed. These schemes, being costly in operation, are feasible only in areas where (i) gravity flow irrigation is not possible (ii) there is keen demand for irrigation and cultivators are enthusiastic, (iii) water is

available in the streams for at least about 200 days in a year, and (iv) cheap electric power is available. Installation of diesel operated pump sets for lifting water makes the operation and maintenance cost of these schemes exorbitantly high. However, for lifting small order of discharge by individual cultivators, portable diesel engine pump sets are feasible as they provide greater flexibility and mobility for installation at different points of the water source or sources.

2.9. CONCEPTS AND DEFINITIONS

Culturable Command Area (CCA): It is the area which can be physically irrigated from a scheme and is fit for cultivation.

Gross Irrigated Area: The total irrigated area under various crops during a year, counting the area irrigated under more than one crop during the same year as many times as the number of crops grown and irrigated.

Gross Irrigation Potential Created by a Scheme: The total gross area proposed to be irrigated under different crops during a year by a scheme. The area proposed to be irrigated under more than one crop during the same year is counted as many times as the number of crops grown and irrigated.

Irrigation Potential Utilised: The gross area actually irrigated during 1993-94 out of the gross proposed area to be irrigated by the scheme during the year.

Minor Irrigation Scheme: A Scheme having CCA up to 2,000 hectares individually is classified as minor irrigation scheme.

Medium Irrigation Scheme: A scheme having CCA more than 2,000 hectares and up to 10,000 hectares individually is a medium scheme.

Major Irrigation Scheme: A scheme having CCA more than 10,000 hectares is known as major irrigation scheme.

2.10 SELECTION OF PRIMARY ENUMERATORS:

2.10.1 The nodal department of States/UTs had full freedom for selecting a particular agency as primary enumerator. It could be the village level workers/patwari/panchayat inspector/any other agency suitable in a particular region. In selecting such agencies as enumerators the nodal departments were required to ascertain that they should have their associations with the farmers and their operation area be the villages under agricultural development programme. The information required in the primary schedules were to be obtained by personal inquiries from the farmers and physical verification/observation by the enumerators in respect of a particular scheme.

2.11 PROCEDURE FOR CONDUCTING CENSUS OPERATION:

2.11.1 The Primary enumerators while negotiating the schedules were to visit the owner of the minor irrigation scheme or its next neighbour and collect information on the basis of personal enquiry from him. The physical verification of the schemes was also to be done by the enumerators. The purpose of the census was to be explained to the farmers to win over their confidence in revealing the specific information in respect of minor irrigation works. Assurance that the data furnished by them would be kept confidential needed to be given to the farmers. Certain information relating to the schemes were to be collected by the enumerators by physical examination of the scheme. After filling up the schedules, the enumerators were required to deposit all completed schedules with the Block Development Officer/Officer in-charge at the block level. The block level officer supplied all the schedules to the district level officer concerned who computerised the data contained in the prescribed schedules and passed on the floppy containing data as well as the schedules, to the Minor Irrigation Census Commissioner of the State/UT.

CHAPTER-3

SALIENT FEATURES

3.1 GENERAL

3.1.1 Some of the important features brought out as a result of second census of minor irrigation schemes in 20 States & 4 U.T.s are highlighted in the following paragraphs

3.2 IRRIGATION POTENTIAL CREATED/UTILISED

3.2.1 The total potential created through minor irrigation schemes has increased from 30.06 million hectares (mha) in 1986-87 to 41.31 mha in 1993-94, while potential utilised through the minor irrigation schemes increased from 25.84 mha in 1986-87 to 31.78 mha in 1993-94.

3.2.2 During the same period the potential created through ground water schemes alone increased to 33.30 mha from 24.02 mha, while the potential utilised through ground water schemes increased to 26.63 mha from 21.24 mha. Similarly, the potential created through surface water minor irrigation schemes increased from 6.04 mha to 8.01 mha, while the potential utilised increased from 4.60 mha to 5.15 mha.

3.2.3 Of all the States, the maximum potential created and utilised through the minor irrigation schemes pertain to Uttar Pradesh which accounts for 27 percent and 28 percent of total potential created and total potential utilised respectively.

3.3 NUMBER OF SCHEMES AND THEIR PERFORMANCE

3.3.1 The total number of minor irrigation schemes increased from 8.24 million in 1986-87 to 9.30 million in 1993-94.

3.3.2 During the year 1993-94, there were 4.09 million electrical and 3.84 million diesel pumps being used for minor irrigation schemes.

3.3.3 The census results have revealed that 98 percent of the dug wells, 99 percent of the shallow tubewells, 81 percent of the deep tubewells, 60 percent of the surface flow and 90 percent of the surface lift schemes were in the private sector. Therefore, the share of public sector in the minor irrigation is very limited.

3.3.4 As per the second census of minor irrigation projects, 7.243 million minor irrigation schemes were under utilised due to various reasons. Of this the percentage of minor irrigation schemes under utilised due to inadequate power, mechanical break down, less water discharge and others is 19.29 percent, 4.99 percent, 20.82 percent and 54.90 percent respectively.

3.3.5 During the census it has been observed that out of 9.30 million minor irrigation schemes, 0.52 million schemes were not in use. Status wise break up of such schemes in terms of percentages are as follows: temporarily out of use- 67.02 percent, abandoned due to salinity- 4.49 percent, dried up -15.19 percent, destroyed - 4.90 percent and others- 8.40 percent. The benefited area lost on account of these schemes was 1.97 mha.

3.4 CROPPING PATTERN

3.4.1 Of the total area irrigated through minor irrigation schemes, kharif crops accounts for 38.27 percent, rabi 53.60 percent, perennial 4.85 percent and others 3.28 percent.

3.4.2 The share of crop-wise area irrigated through minor irrigation schemes as supplementary source of irrigation was 10.29 percent.

CHAPTER-4 LIMITATIONS

4.1 RELIABILITY OF DATA

4.1.1 The Second Census of Minor Irrigation Works, has been completed by the States/UTs on various dates in a span of about five years. A number of difficulties were encountered by the States in its completion. Depending on the gap between the reference year and the date of census, the reliability of data varies. Smaller the gap, more reliable the data collected. Despite best efforts by the Minor Irrigation Census Commissioners in the States, certain limitations remain in this report to be looked into in future census operation. Broadly these limitations are elaborated in the following paragraphs.

4.2 LACK OF INFORMATION

4.2.1 Census of minor irrigation works could not be completed in Gujarat, Karnataka, Maharashtra and Tamilnadu, as yet. In Gujarat and Maharashtra the work has been held up due to non-cooperation of talaties, the primary enumerators. In Gujarat, the census work could be completed in only two districts, while more than 70 percent work was completed in four other districts. In Maharashtra, the census work could be completed in only three districts, while in remaining districts, it is at different stages of completion. Although the Government of Karnataka & Tamilnadu completed the census work, the scrutiny of the data revealed that there are a number of discrepancies in the data.

4.2.2 The data contained in the village schedules has not been collected during census by some of the States such as J&K and Manipur.

4.3 CORRECTION FACTOR

4.3.1 The correction factors were to be worked out on the basis of 5 percent sample checks to assess the under-enumeration or over-enumeration of data but most of the States have not worked out such factor.

4.4 INCONSISTANCIES/EXPLANATIONS

4.4.1 The census figures relating to irrigation potential created/utilised in respect of ground water schemes has exceeded the corresponding utilisable irrigation potential figures given by the Central Ground Water Board in case of Haryana, Punjab and Rajasthan. As per the view expressed by CGWB, this is due to the fact that while working out utilisable resource, only the annual ground water recharge is taken into account and also due to over-exploitation of dynamic resource and development of ground water from deeper levels (confined aquifers). On account of this, there is continuous decline of ground water levels and/or decline in piezometric head.

ANNEXURES

ANNEX.1.

M. S. Reddy
Secretary (WR)

Government of India
Ministry of Water Resources
Shram Shakti Bhawan,
Delhi-1.
Dated:23.9.1994.

D.O.No.9/10/90-MIT

Dear

With a view to prepare a realistic and sound database for minor irrigation sector, a second census of minor irrigation works with reference to 1993-94 is being taken up by all the States/UTs under a centrally sponsored scheme entirely funded by the Centre. (Name of the nodal department) has already been declared as the nodal department in (name of the State/UT) for compilation of minor irrigation statistics for the State as a whole. The head of the nodal department may kindly be declared as the minor irrigation census commissioner. He may be made responsible for conducting the census operation successfully. The nodal department is being requested separately for sending us the proposal for release of central grant required for census operation.

I shall be grateful, if suitable instructions in this regard are issued to all the concerned departments to ensure their cooperation in completing the census operation expeditiously.

With regards,

Yours sincerely,
Sd/-
(M.S. Reddy)

To
All the Chief Secretaries of the State/UT.

L.K. Joshi,
Joint Secretary (CAD & MI)

D.O. No. 9-10/90-MIT

ANNEX-II
Government of India
Shram Shakti Bhawan,
New Delhi-1.
Dated: 11.11.1994.

Dear

You must be aware that Centrally Sponsored Scheme for rationalisation of minor irrigation statistics was taken up by the Government of India in the 7th Five Year Plan and continues in the current plan. Apart from rationalisation of statistics, the scheme also envisages second census of Minor Irrigation Works with 1993-94 as the base year. Secretary to the Government of India, Ministry of Water Resources had written to the Chief Secretaries of the States by his D.O. letter No. 9/10/90-MIT dated 23.9.1994 for nominating minor irrigation census commissioners for their States. We have received responses from the Chief Secretaries of 10 States. The rest have yet to respond.

We have presumed that being the Secretary, in-charge of the minor irrigation, you would probably be dealing with this subject. I am enclosing a copy of the letter written by the Secretary (MOWR) to the Chief Secretaries of your State. May I request you please to let us know who in your state has been nominated as the minor irrigation census commissioner?

Enclosed with this letter is a note giving broad guidelines for scope, coverage, methodology, schedules along with instructions and funding pattern etc. for conducting the census. The formation of the proposal for grant-in-aid is also enclosed on the basis of which your proposal may please be formulated and sent to us at the earliest. This is in order to enable us to release 40 per cent of the central grant-in-aid in advance.

I will be grateful if you could please indicate the schedule for conducting the census. This should broadly conform to the time schedule indicated by us.

A very early reply to this letter will be greatly appreciated.

With regards,

Yours sincerely,
Sd/-
(L.K. Joshi)

To
The Secretary (Irrigation) of all the States/Uts.

ANNEX-III SCHEDULES AND INSTRUCTIONS FOR COLLECTION OF DATA

PRIMARY SCHEDULES FOR CANVASSING SCHEDULE A-1 DUGWELLS
(COMPLETED) Reference year: 1993-94

1. IDENTIFICATION:

Name of the state with code no. ()	Name of the district with code no. ()	Name of the block with code no. ()	Name of the village with code no. ()	Date of enumeration
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2. SPECIFIC INFORMATION

Sl.no.	Name of the owner	Khasra no./plot/survey/local no./in	Holding size of the owner	Social status of scheme owner	Year of commissioning	Type of well
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(1)	(2)(a)	(2)(b)	3	4	5	6
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Status of well	Source of finance	Water distribution device used	Length of the distribution channel(in mtr)				Lifting device	Horse power of the lifting device	Average no. of pumping hour per day during peak season.
			pucca	kuccha	Under ground	Total			

7	8	9	10	11	12	13	14	15	16
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Culturable command area(ha.)	Whether well is located in the command of major/medium schemes	Seasonwise irrigation potential created(ha.)					Total	Seasonwise area irrigated during 1993-94 (ha.)					Total
		Kharif	Rabi	Pere- nnial	Others			Kharif	Rabi	Pere- nnial	Others		
17	18	19	20	21	22	23	24	25	26	27	28		

Seasonwise area irrigated by major and medium scheme out of Col.24 to 28						Constraints in way of full utilisation of irrigation potential	
Kharif	Rabi	Perennial	Others	Total			
29	30	31	32	33		34	

Signature of the Enumerator
Name:
Designation:
Signature of

Enumerator
Checked by:
Name & Designation of
the Supervisory Officer:

INSTRUCTIONS FOR FILLING UP THE SCHEDULES-SCHEDULE A-1 DUGWELL

NOTE: The well has to be enumerated only when it is meant for irrigation and is complete. It covers ordinary open wells of varying dimensions dug or sunk from the ground surface into water bearing stratum to extract water for irrigation purposes. These are broadly masonry wells, kutchha wells and dug-cum-bore wells. All such schemes are of private nature usually belonging to individual cultivators.

Column 1: All dugwells in the village are to be serially numbered to ensure 'none is missed'. Serial number of dugwell in the village is to be noted under this column.

Column 2(a): The owner of the dugwell may be farmer /cooperative society/government department/organisations/group of farmers. The name of owner is to be indicated in this column. In case of absentee, it may be enquired from the neighbour or the person who is in possession of the dugwell and the appropriate code number be noted as indicated below:

Code no. Description

- 1 Government owned
- 2 Co-operative owned
3. Panchayat owned
4. Owned by group of farmers
5. Owned by individual farmers
6. Others

Column 2(b): Khasra no./Plot no./Survey no./ in which the dugwell is installed be noted in the column for physical verification etc. which may be needed at a later date.

Column 3: Under this column, size of ownership holding is to be considered. Ownership holding will not include the land leased in or leased out from/to the other farmers for cultivation by the owner of the scheme. The appropriate code no. be noted as given below:-

Code no. Holding size

1. 0 – 1 Ha. (Marginal farmers)
2. 1 – 2 Ha. (Small farmers)
3. 2 – 10 Ha. (Medium farmers)
4. More than 10 Ha. (Big farmers)

Column 4: Appropriate code number would be indicated under it for scheduled caste or scheduled tribe, others as the case may be as given below:

Code no. Social Status

1. Scheduled Caste
2. Scheduled Tribe
3. Others

Column 5: Appropriate code number for the year of commissioning of the scheme should be mentioned. The schemes which were installed during 1986-87 or before are to be indicated with code number '1' only. Code numbers are given below:

Code no. Year of commissioning

- | | |
|---|----------------------|
| 1 | on or before 1986-87 |
| 2 | during 1987-88 |
| 3 | during 1988-89 |
| 4 | during 1989-90 |
| 5 | during 1990-91 |

- 6 during 1991-92
- 7 during 1992-93
- 8 during 1993-94

Column 6: Dugwells are classified into 3 types and appropriate code number be noted as :

Code no. Type of Well

- 1. Pucca Well: Well having a brick lining or stone or concrete wall is called a pucca well.
- 2. Kuccha Well: Other than the pucca well is identified as kuccha well.
- 3. Dug-cum-borewell: Dugwells are frequently bored through the bottom to augment their output. These are referred to as dug-cum-borewells.
- 4. Other: Any other type of well such as artisan well, bamboo well, etc.

Column 7: The purpose is to know whether the well is in use at present or not. The appropriate code number be noted as given below :

Code no.

- 1. In use: If well is presently (i.e. during 1993-94) being used for irrigation.
- 2. Not in use: temporarily: If the well is not in use during last 2 years due to temporary reason but has also not been abandoned for use.
- 3. Not in use: permanently: If the well is not in use and has been abandoned due to salinity.
- 4. Permanently abandoned due to dried up.
- 5. Permanently destroyed beyond repair.
- 6. Permanently abandoned due to any other reason.

Column 8: It is intended to find out the sources of financing the scheme which could be through farmers' own savings, bank loan or Governments subsidies. It may be indicated as any of the following alternatives and appropriate code number noted.

Code no.

- 1. Own savings of farmers
- 2. Bank loan and savings
- 3. Government subsidy and Bank loan
- 4. Government subsidy only
- 5. Others

Column 9: Farmers are adopting different type of water conveyance channels and irrigation methods. Recently, sprinkler and drip irrigation methods have gained popularity among the farmers besides continuing conventional methods of ground water channel, under ground water channel, etc. Appropriate code number (s) is to be indicated for the water distribution devices being used by the farmers and indicated below:

Code no. Device used

- 1. Sprinkler
- 2. Drip
- 3. Open water channel
- 4. Underground channel
- 5. Others

Column 10 to 13: Length of the channel is to be recorded in meter's under these columns. In a scheme, there can be pucca channel, kuccha channel or underground channel or even a combination of these.

Column 14: The device used for lifting water from the well is to be indicated by appropriate code as given below:

Code no.	Lifting device
1	Electric pump
2	Diesel pump
3	Wind mills
4	Solar pump
5	Manual/animal operated lift
6	Others

Column 15: Record the Horse Power (HP) of the prime mover used for lifting water.

Column 16: It is to be noted that on an average, for how many hours per day, the water is being pumped out from the well during peak days of a season.

Column 17: Under this column, the area which is proposed to be irrigated by the dug-well should be indicated in hectares. It is generally the measurement of the field proposed to be irrigated by the dug-well at the time of installation. In case the dug-well is very old and culturable command area is not available, the current maximum culturable command area of the dug-well has to be noted.

Column 18: Some of the minor irrigation schemes are located in the command of major and medium schemes for conjunctive use. Such schemes have to be enumerated. The appropriate code number be noted as given below:

1. Yes ; 2. No

Column 19 to 23: It is intended to find out the gross potential created from the scheme. It will indicate the area under kharif, rabi, perennial and other crops as proposed to be irrigated. The total of column 19 to 22 is to be noted in column 23. The figures under columns 19,20,21 and 22 should be seasonwise area proposed to be irrigated by the scheme. If the well has been improved upon or augmented, then revised potential is to be indicated. Column 23 will indicate the gross irrigation potential created. The figure in column 23 would certainly be higher or equal to the CCA reported in column 17.

Column 24 to 28: In these columns, the area actually irrigated during kharif, rabi, perennial and other crops is to be indicated. The area irrigated under different seasons may be taken for the year 1993-94 i.e., commencing kharif in 1993 and ending rabi in 1994. Column 28 will indicate the gross irrigation potential utilised. Figure in column 28 would be less than or equal to the figure in column 23.

Column 29 to 33: Some of the minor irrigation wells are located in the command of major and medium irrigation projects and thus, they serve the purpose of supplementary irrigation. In order to assess the extent of such supplementary irrigation, data are to be recorded under column 29 to 33 regarding area which has also received irrigation from major/medium source during the same crop season and that area is to be recorded season-wise.

Column 34: The idea is to find out the reason for the shortfall between the figure under the columns 23 and 28. The appropriate code number as mentioned below be noted:

Code no.	Constraints
1.	Non-availability of adequate power
2.	Mechanical break-down
3.	Less water discharge in the well
4.	Any other reason.

PRIMARY SCHEDULES FOR CANVASSING SCHEDULE A-2 SHALLOW TUBEWELLS

Reference Year 93-94

1. Identification:

Name of the State with code in ()	Name of the district with code in ()	Name of the block with code in ()	Name of the village with code in ()	Date of enumeration
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2. Specific information:

Sl. No.	Name of the owner	Khasra number/ plot/survey/ local number/in	Holding size of the owner	Social status of scheme owner	Year of commissioning	Type of well
1	2(a)	2(b)	3	4	5	6

Status of well	Source of finance	Water distribution device used	Length of the distribution channel (in metre)				Lifting device	Horse Power of the lifting device	Average no. of pumping hour per day during peak season
			Pucca	Kuccha	Under ground	Total			
7	8	9	10	11	12	13	14	15	16

Whether Tubewell is located in the command of major/medium schemes like canal etc.	Culturable Command Area (ha.)	Season-wise irrigation potential created(ha.)					Total
		Kharif	Rabi	Perennial	Others		
17	18	19	20	21	22	23	

Season-wise area actually irrigated during 1993-94 (ha.)

Kharif	Rabi	Perennial	Others	Total
24	25	26	27	28

Season-wise area also irrigated by major & medium schemes out of col.24 to 28					Constraints in way of full utilisation of irrigation potential
Kharif	Rabi	Perennial	Others	Total	
29	30	31	32	33	34

Checked by -----
Name & Designation of Supervisory Officer

Signature of Enumerator
Name & Designation:

SCHEDULE A-2 –SHALLOW TUBEWELL

Note: The well had to be enumerated only when it is meant for irrigation and is complete. A shallow tube-well is, which consists of a borehole built into ground with the purpose of tapping ground water from previous zones. These tube-wells are either cavity tube-wells or strainer tube wells usually drilled by percussion method of using hand boring sets and sometimes percussion rigs coir structures from by binding coir string over a iron frame or bamboo frame are used as strainer. Bore-wells in which borehole is stable without a lining in the bottom portion and a tube is inserted only in the upper zone are also shallow tube wells.

A tube well depth up to 70 meters in sedimentary formation and with a discharge of 100 to 300 cubic meters per day (with 7 to 8 hours of running in a day) during irrigation season and with a culturable command area of not less than 4 hectares may be taken as shallow tube well.

Column 1: All shallow tube well in the village are to be serially numbered to ensures that none is missed. Serial number of shallow tube-well in the village is to be noted under this column.

Column 2(a): The owner of the shallow tube well may be a farmer/cooperative society/government department/organisations/ group of farmers. The name of the owner is to be indicated in this column. In case of absentee, it may be enquired from the neighbour of the person who is in possession of the shallow tube well and the appropriate code no. be noted as indicated below:

Code no.: Description

1. Government owned
2. Cooperative owned
3. Panchayat owned
4. Owned by group of farmers
5. Owned by individual farmers
6. Others.

Column 2(b): khasra number/plot no./survey no. in which the shallow tube well is installed be noted in the column for physical verification etc. which may be needed at a later date.

Column3: Under this column, size of the ownership holding is to be considered. Ownership holding will not include the land leased in or leased out from/to the other farmers for cultivation by the owner of the scheme. The appropriate code no. be noted as given below:-

Code no.: Holding size

1. 0-1 ha. (marginal farmers)
2. 1-2 ha. (small farmers)
3. 2-10 ha. (medium farmers)
4. More than 10 ha. (Big farmers)

Column 4: Appropriate code no. would be indicated under it for scheduled caste or schedule tribe, others as the case may be as given below:

Code no.: Social status

1. Schedule Caste
2. Schedule Tribe
3. Others.

Column5: Appropriate code no. for the year of commissioning of the scheme should be mentioned. The scheme which were installed during 1986-87 or before are to be indicated with Code no. '1' only. Code nos. are given below:

Code no.: Year of commissioning

1. On or before 1986-87
2. During 1987-88
3. During 1988-89
4. During 1989-90
5. During 1990-91
6. During 1991-92
7. During 1992-93
8. During 1993-94

Column 6: Shallow tube-wells are classified into three types and appropriate code no. be noted as given below:

Code no.:

1. Shallow tube well: A tube well is sedimentary formations not exceeding 7 meters in depth and discharge.

2. Filter point: Small diameters tube well (less than 75m.m. diameter) from which water is lifted mostly manually may be termed as filter point.
3. Bore well: Shallow tube well in the hard rock areas are called bore well because in such wells the bore-hole is able to hold on its own in the bottom portion and a tube is pushed only in the upper weathered zone.
4. Others.

Column 7: The purpose is to know whether the well is in use at present or not. The appropriate code be noted as below:

Code no.:

1. In use: if tube well is presently (i.e. during 1993-94) being used for irrigation.
2. Not in use: temporarily: if the tube well is not in use during last two years due to temporary reasons but has also not been abandoned for use.
3. Not in use: permanently: if the tube well is not in use and has been abandoned due to salinity.
4. Permanently abandoned due to dry up.
5. Permanently destroyed beyond repair
6. Permanently abandoned due to any other reason.

Column 8: It is intended to find out the sources of financing the scheme which could be through farmers' own savings; bank loan or government subsidies. It may be indicated as any of the following alternatives and appropriate code number be noted:

Code no:

1. Government Funds
2. Own saving of farmers
3. Bank loan and savings
4. Government subsidy and bank loan
5. Government subsidy only
6. Others.

Column 9: Farmers are adopting different types of water conveyance channel and irrigation methods. Recently, sprinkler and drip irrigation methods have gained popularity among the farmers besides continuing conventional methods of ground water channel, under ground water channel, etc. Appropriate code (s) is to be indicated for the water distribution device being used by the farmers and indicated below:

Code no. Device used

1. Sprinkler

2. Drip
3. Open water channel
4. Under Ground Channel
5. Others

Column 10 to 13: Length of the channel is to be recorded in meters under these columns. In a scheme, there can be pucca channel, kuccha channel or under ground channel or even a combination of these.

Column 14: The device used for lifting water from the well is to be indicated by appropriate code no. as given below:

Code no.: Lifting device

1. Electric pump
2. Diesel pump
3. Wind mills
4. Solar pumps
5. Manual/animal driven
6. Others.

Column 15: Record the horsepower (HP) of the prime mover used for lifting water.

Column 16: It is to be noted that on an average, for how many hours per day, the water is being pumped out from the well during peak days of a season.

Column 17: Under this col. the area which is proposed to be irrigated by the shallow tube well should be indicated in ha. It is generally the measurement of the field proposed to be irrigated by the shallow tube well at the time of installation. In case the well is very old and the culturable command area is not available, the current maximum culturable command area of the well has to be noted.

Column 18: Sometimes several minor irrigation schemes are located in the commands of major and medium schemes for conjunctive use. Such schemes have to be numerated. The appropriate code no. be noted as given below:-

Code no.

1. Yes.
2. No.

Column 19 to 23: It is intended to find out the gross potential created from the scheme. It will indicate the area under kharif, rabi, perennial and other crops is proposed to be irrigated. The total of the column 19 to 22 is to be noted in column 23. The figures under columns 19,20,21&22 should be season-wise area proposed to be irrigated by the scheme. If the well has been improved upon or augmented, than revised potential is to be

indicated. column 23 will indicate the gross irrigation potential created. The figures in column 23 would certainly be higher or equal to the CCA reported in column 17.

Column 24 to 28: In these columns, the area actually irrigated during kharif, rabi, perennial crops and other crops is to be indicated. The area irrigated under different seasons may be taken for the year 1993-94 i.e. commencing kharif in 1993 and ending rabi 1994. column 28 will indicate the gross irrigation potential utilised. Figures in column 28 would be less than or equal to the figure in column 23.

Column 29 to 33: Some of the minor irrigation shallow tube wells are located in commands of major/medium irrigation projects. And thus, they serve the purpose of supplementary irrigation. In order to assess the extent of such supplementary irrigation, data is to be recorded under column 29 to column 33 regarding area which has also received irrigation from major/medium sources during the same crop season. And that area is to be recorded season-wise.

Column 34: The idea is to find out the reasons for the short fall between the figures under the column. 23 and 28. The appropriate code no. as mentioned below be noted:

Code no.: Constraints

1. Non-availability of adequate power
2. Mechanical break down
3. Less water discharge in the well
4. Any other reason.

PRIMARY SCHEDULE FOR CANVASSING SCHEDULE A-3 DEEP TUBEWELLS (COMPLETED)Reference year 1993-94**1. IDENTIFICATION PARTICULARS:**

Name of the State Name of the district Name of the block Name of the village Date

with code in () with code in () with code in () with code in () of Enumeration

2. SPECIFIC INFORMATION

Sl. no.	Name of the owner/ name of the scheme	Khasra no./ plot/ survey/ local no. in which the tubewell is located	Holding size of the owner	Social status of the owner of the scheme	Year of commissioning	Diameter (in m.m.) and depth of the tubewell (in m.m.)
(1)	(2a)	(2b)	(3)	(4)	(5)	(6)

Status of well	Source of finance	Water distribution device used on the scheme	Length of the distribution channel (mts)			
			Pucca	Kuccha	Underground	Total
(7)	(8)	(9)	(10)	(11)	(12)	(13)

Lifting device	Horse power of lifting device	No. of average pumping hour per day during peak season	Whether tubewell is located in the command of major/ medium schemes like canal etc.	Culturable command area (ha.)
(14)	(15)	(16)	(17)	(18)

Season-wise irrigation potential created during 1993-94 (ha.)	Season-wise area actually irrigated during 1993-94 (ha.)
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Kharif Rabi Perennial Others Total	Kharif Rabi Perennial Others Total
(19) (20) (21) (22) (23) (24)	(25) (26) (27) (28)

Season-wise area also irrigated by major & medium schemes out of Col. 24 to 28	constraints in way of full utilisation of irrigation potential
--	--

Kharif Rabi Perennial Others Total	
(29) (30) (31) (32) (33)	(34)

Checked by -----	Signature of Enumerator
Name & Designation of Supervisory Officer	Name & Designation:

SCHEDULE A-3- DEEP TUBE WELL

Note: The well has to be enumerated only when it is meant for irrigation and is complete. Deep tube wells are usually designed to give a discharge of 100 to 200 cubic meter per hour and extends to the depth of 70 meter or more only. These include wells which are drilled by rotary percussion of rotary cum percussion rigs. Deep tube wells are usually owned and operated by Government departments or corporations. Its annual output is approximately 15 times that of an average shallow tube well depending on power availability.

Column 1: All deep tube-wells in the village are to be serially numbered to ensure 'none is missed'. Serial number of deep tube-well in the village is to be noted under this column.

Column 2(a): deep tube wells are usually owned and operated by State government Departments or corporations. The name of the owner is to be indicated in this column and the appropriate code number be noted as indicated below:-

Code no.: Description

1. Government department/corporation
2. Cooperative owned

3. Panchayat owned
4. Group of farmers
5. Others.

Column 2 (b): Khasra no./plot no./survey no. in which the deep tube wells is installed be noted in the column for physical verifications etc. which may be needed at a later date.

Column3: Under this column size of ownership holding is to be considered. Ownership holding will not include the land leased in or leased out from/to the other farmers for cultivation by the owner of the scheme. Holding size is to be recorded only when the deep tube well happens to be owned by the individual or group of farmers then the appropriate code no. be noted as given below:

Code no.: Holdings.

1. 0-1 hectare (marginal farmers)
2. 1-2 ha. (small farmers)
3. 2-10 hectare (medium farmers)
4. More than 10 hectare (big farmers)

Column 4: Appropriate code would be indicated under it for schedule caste or scheduled tribe, others as the case may be as given below:-

Code no.: Social status

1. Scheduled Caste
2. Scheduled Tribe
3. Others.

Column 5: Appropriate code for the year of commissioning of the scheme should be mentioned. The scheme which were installed during 1986-87 or before are to be indicated with code no. '1' only. Codes are given below:-

Code no.: Year of commissioning

1. On or before 1986-87
2. During 1987-88
3. During 1988-89
4. During 1989-90
5. During 1990-91
6. During 1991-92
7. During 1992-93
8. During 1993-94

Column 6: The diameter of the delivery pipe is to be noted in millimeters and the depth of the tube well in meters.

Column 7: The purpose to know whether the tube-well is in use at present or not. The appropriate code number be noted as given below:

Code no.:

1. In use: If tube well is presently (i.e. during 1993-94) being used for irrigation

2. Not in use: Temporarily: If the tube well is not in use during last two years due to temporary reasons but has also not been abandoned for use.
3. Permanently abandoned due to dried up
4. Permanently destroyed beyond repair
5. Permanently abandoned due to any other reason

Column:8 The deep tube well are usually owned by government or its allied department or a corporation under it. Therefore in many cases the government itself is the source of financing the scheme. However, in exceptional cases where deep tube-well are build up either by an individual farmer or group of farmers or cooperatives. It may be indicated as any of the following alternatives and appropriate code no. be noted.

Code no.:

1. Government funds
2. Own saving of farmers
3. Bank loan and saving
4. Government subsidy and bank loan
5. Others.

Column 9: Farmers are adopting several different types of water conveyance channels and irrigation methods. Recently sprinkler and drip irrigation methods have gained popularity among the farmers besides continuing conventional methods of ground water channel; underground water channel; etc. Appropriate code no.(s) is to be indicated for the water distribution device being used by the farmers and indicated below:-

Code no.: Device used

1. Sprinkler
2. Drip Irrigation
3. Open water channel
4. Underground Channel
5. Others.

Column 10 to 13: Length of the channel is to be recorded in meters under these columns. In a scheme, there can be pucca channel, kutchha channel or underground channel or even a combination of these.

Column 14: The device used for lifting water from the tube-well is to be indicated by appropriate code no. as given below:-

Code no.: Lifting device

1. Submersible pump
2. Turbine pump
3. Others.

Column 15: Record the Horse Power (HP) of the prime mover used for lifting water.

Column 16: It is to be noted that on an average, for how many hours per day, the water is being pumped out from the tube well during peak days of a season.

Column 17: Sometimes several minor irrigation schemes are located in the commands of major and medium schemes for conjunctive use. Such schemes have to be enumerated. The appropriate code no. be noted as given below:-

Code no.:

1. Yes
2. No
3. Yes for augmentation

In case the deep tube well is for augmentation purpose, rest of the column would remain blank.

Col. 18: Under this column the area which is proposed to be irrigated by the deep tube well should be indicated in ha. It is generally the measurement of the field proposed to be irrigated by the deep tube well at the time of installation. In case the deep tube well is very old and the culturable command area is not available, the current maximum culturable command area of the deep tube well has to be noted.

Column 19 to 23: It is intended to find out the total potential created from the scheme. It will indicate the area under kharif, rabi, perennial and other crops as proposed to be irrigated. The total of column 19 to 22 is to be noted in column 23. The figures under column 19, 20, 21 and 22 should be season-wise area proposed to be irrigated by the scheme. If the tube well has been improved upon or augmented, then revised potential is to be indicated. Column 23 will indicate the gross irrigation potential created. The figure in column 23 would certainly be higher or equal to the CCA reported in column 17.

Column 24 to 28: In these columns, the area actually irrigated during kharif, rabi, perennial crops and other crops is to be indicated. The area irrigated under different seasons may be taken for the year 1993-94 i.e. commencing from kharif in 1993 and ending rabi 1994. Column 28 will indicate the gross irrigation potential utilised. Figure in column 28 would be less than or equal to the figures in column 23.

Column 29 to 33: Some of the minor irrigation deep tube well are located in the commands of major/medium irrigation projects. And thus, they serve the purpose of supplementary irrigation or conjunctive use. In order to assess the extent of such supplementary irrigation, data is to be recorded under Col. 29 to Col. 33 regarding area which has also received irrigation from major/medium sources during the same crop season. And that area is to be recorded season wise.

Column 34: The idea is to find out the reasons for the shortfall between the figures under the columns 23 and 28. The appropriate code no. as mentioned below may be noted:

Code no. Constraints

1. Non availability of adequate power
2. Mechanical breakdown
3. Less discharge in the well
4. Any other reason.

PRIMARY SCHEDULE FOR CANVASSING SCHEME A-4 SURFACE FLOW IRRIGATION SCHEME
(COMPLETED)

1. IDENTIFICATION

Name of the State with code in () Name of District with code in () Name of the block with code in () Name of the Village with code in () Date of enumeration

2. SPECIFIC INFORMATION

S. Name of the Khasra/plot Holding Social status Year of Type of Status of
no. scheme and survey/local size of of the owner commiss- scheme scheme
owner no. of head- the ioning
work owner

(1) (2a) (2b) (3) (4) (5) (6) (7)

Source of Water distribution Length of distribution channels (in mts.) Culturable
finance device used on the Pucca Kutcha Underground Total command area
Scheme (ha.)

(8) (9) (10) (11) (12) (13) (14)

Whether Season-wise irrigation potential Season-wise area irrigated during
scheme is created (ha.) 1993-94 (ha.)

located in
the

command Kharif Rabi Perennial Others Total Kharif Rabi Perennial Other Total
of major/
medium
scheme

(15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (25)

Season-wise area also irrigated by major and medium schemes out of

Constraints in way of full utilisation of irrigation potential

Column 21 to 25(ha.)

Kharif Rabi Perennial Others Total

(26) (27) (28) (29) (30) (31)

Checked by -----

Signature of Enumerator

Name & Designation of

Name & Designation

Supervisory officer

SCHEDULE A –4 SURFACE FLOW IRRIGATION SCHEME

Note: All surface flow irrigation schemes which are exclusively based on irrigation by gravity flow are to be covered. In case, surface flow schemes having lifting device also installed on it and the irrigation is partly done through lifting the water and partly by gravitational method turn by turn or simultaneously the scheme has to be accounted only as one, either as surface lift scheme or surface flow depending upon the acreage irrigated during the year 1993-94 whichever is more of the two. It covers storage schemes; diversion schemes; water conservation-cum-ground water recharging schemes.

Storage schemes include tanks and reservoirs which impound water of streams and rivers purposes. Small storage tanks which are called ponds or bundhis are also covered. The essential features of these schemes are (1) a bund or a dam which is generally of earth but also sometimes partly or fully massonary, (b) anicuts and feeder channels to divert water from adjoining catchments. (c) a waste weir to dispose of surplus flood water, (d) sluice or sluices to let out water for irrigation and (e) conveyance and distribution system.

Diversion schemes aim at providing gravity flow irrigation by more diversion of stream water supply without arranging any storage. Essentially this scheme consists of two parts: (a) An obstruction (weir) or bund constructed across the stream for raising and diverting water. Water Conservation cum-ground water recharging schemes so mainly help replenishing the ground water and are not meant for direct irrigation. These include Ahars; Percolation tanks, Check Dams, etc.

Column 1: All surface flow schemes in the village are to be serially numbered to ensure that none is missed. Serial No. of the scheme in the village is to be noted under this column.

Column 2(a): The owner of the surface flow irrigation schemes may be farmer/cooperative society/government department/organisation/group of farmers. The name of the owner and the scheme is to be indicated in this column. In case of absentee it may be enquired from

the neighbour of persons who is in possession of the scheme and the appropriate code no. be noted as indicated below:

Code no.: Description

1. Government owned
2. Cooperative owned
3. Panchayat owned
4. Owned by group of farmers
5. Owned by individual farmers
6. Others.

Column 2(b): Khasra no./plot no./survey no. in which the scheme is located be noted in this column for physical verification etc. which may be needed at a later date.

Column 3: Under this column size of ownership holding is to be considered. Ownership holding will not include the land leased in or leased out from/to the other farmers for cultivation by the owner of the scheme. The appropriate code no. be noted as given below:

Code: no. Holding size

1. 0-1 ha. (marginal farmers)
2. 1-2 ha. (small farmers)
3. 2-10 ha. (medium farmers)
4. More than 10 ha. (big farmers)

Column 4: Appropriate code would be indicated under it for Scheduled Caste or Scheduled Tribe, others as the case may be as given below:

Code no.: Social Status

1. Scheduled Caste
2. Scheduled Tribes
3. Others.

Column 5: Appropriate code for the year of commissioning of the scheme should be mentioned. The schemes which were installed during 1986-87 or before are to be indicated with code no. '1' only. Code no. (s) are given below:-

Code no. Year of Commissioning

1. On or before 1986-87
2. During 1987-88
3. During 1988-89
4. During 1989-90
5. During 1990-91
6. During 1991-92
7. During 1992-93
8. During 1993-94

Column 6: Surface flow irrigation schemes may be broadly classified into three types. Appropriate code no. may be noted in the column.

Code no. Description

1. Storage schemes big or small storages, tanks, ponds, bundhis, etc.
2. Permanent diversion: Diversions are constructed for utilising the flowing of water of a big stream or river for diverting higher discharges with proper regulation structures equipped with suitable types of gates.
3. Temporary Diversion: In case of small schemes, the water is usually diverted by constructing temporary bunds across the streams made up of earth, stones or even bamboos. The discharge tackled being of small order the bund on the head of the channel is not provided with any gated structure for controlling and regulating the flow.
4. Water Conservation-cum-ground water schemes (recharging) percolation tanks, checks dams, etc.

Column 7: The purpose is to know whether the scheme is in use at present or not. The appropriate code no. be noted as given below:

1. In use: If scheme is presently being used for irrigation
2. Not in use: Temporarily: If the scheme is not in use during last two years but has also not been abandoned for use.
3. Not in use: Permanently: If the scheme is not in use and has been abandoned due to salinity.
4. Permanently abandoned due to dried up
5. Permanently destroyed beyond repair.
6. Permanently abandoned due to any other reason

Column 8: It is intended to find out the sources of financing the scheme which would be through farmers' own savings; bank loan or government subsidies. It may be indicated as any of the following alternatives and appropriate code no. be noted:

Code no.:

1. Government funds
2. Own savings of farmers
3. Bank loan and savings
4. Government subsidy and bank loan
5. Government subsidy only
6. Others.

Column 9: Farmers are adopting different types of water conveyance channels and irrigation methods. Recently sprinkler, drip irrigation methods have gained popularity among the farmers besides continuing conventional methods of ground water channel; underground water channel; etc. Appropriate code no.(s) is to be indicated for the water distribution devices being used by the farmers and indicated below:-

Code no. Device used

1. Sprinkler
2. Drip
3. Open water channel

4. Underground channel
5. Other.

Column: 10 to 13: Length of the channel is to be recorded in metres under the columns. In a scheme there can be pucca channel; kuchha channel or underground channel or even a combination of these.

Column 14: Under this column the area which is proposed to be irrigated by the scheme should be indicated in ha. It is generally the measurement of the field proposed to be irrigated by the scheme at the time of installation. In case the scheme is very old and the culturable command area is not available, the current maximum CCA of the scheme has to be noted.

Column 15: Sometimes several minor irrigation schemes are located in the commands of major and medium schemes for conjunctive use. Such schemes have to be enumerated. The appropriate code no. be noted as given below:-

Code no.

1. Yes ; 2. No ; 3. Yes for augmentation

Column 16 to 20: It is intended to find out the gross potential created from the scheme. It will indicate the area under kharif, rabi, perennial and other crops proposed to be irrigated. The total of the column 16 to 19 is to be noted in column 20. The figures under columns 16,17,18 and 19 should be season wise area proposed to be irrigated by the Scheme. Column 20 will indicate the gross irrigation potential created. The figure in column 20 would certainly be higher or equal to the culturable command area reported in column 14.

Column 21 to 25: In these columns the area actually irrigated during kharif, rabi, perennial and other crops is to be indicated. The area irrigated under different seasons may be taken for the year 1993-94 i.e. commencing from kharif, in 1993 and ending rabi 1994. Column 25 will indicate the gross irrigation potential utilised. Figures in column 25 would be less than or equal to the figure in column 20.

Column 26 to 30: The area out of the area recorded under column (21) to column (24) which have received irrigation from the major and medium sources during the same season has to be noted here.

Column 31: The idea is to find out the reason for the shortfall between the figures under the columns 20 to 25. The appropriate code no. as mentioned below be noted:

Code no. Constraints

1. Storage has not been filled up fully
2. Siltation of storage tank
3. Break down of channels
4. Others

PRIMARY SCHEDULE FOR CANVASSING SCHEDULE A-5 SURFACE LIFT IRRIGATION SCHEME (COMPLETED)

IDENTIFICATION:

Name of the State with code in ()	Name of District with code in ()	Name of Block with code in ()	Name of the Village with code in ()	Date of Enumeration
---------------------------------------	--------------------------------------	-----------------------------------	--	---------------------

2. SPECIFIC INFORMATION

S. Name of the no. scheme and owner	Khasra/plot survey/local no. of head- work	Holding size of the owner	Social status of the owner of the scheme	Year of comm- issioning	Type of scheme	Status of scheme
---	---	------------------------------	--	-------------------------------	-------------------	------------------------

1	2(a)	2(b)	3	4	5	6	7
---	------	------	---	---	---	---	---

Source of finance	Water distribu- tion device used on scheme	Length of distribution channel (in metres) Pucca Kuccha Under- Total ground				Lifting device	Horse Power of lifting device	Average pumping hours per day during peak season	Culturable command area (ha.)
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8	9	10	11	12	13	14	15	16	17
---	---	----	----	----	----	----	----	----	----

Whether well is located in the command of major/ medium scheme	Seasonwise irrigation potential <u>created (in ha.)</u>						Seasonwise area irrigated <u>during 1993-94 (ha.)</u>				
	Kharif	Rabi	Perennial	Others	Total		Kharif	Rabi	Perennial	Others	Total

18	19	20	21	22	23	24	25	26	27	28
----	----	----	----	----	----	----	----	----	----	----

Seasonwise area also irrigated by major & medium schemes out of Col. 24 to 28

Constraints in way of full utilisation of irrigation potential

Kharif	Rabi	Perennial	Others	Total
29	30	31	32	33

34

Checked by
Name & Designation of
Supervisory Officer

Signature of Enumerator
Name & Designation :

INSTRUCTIONS FOR FILLING UP THE SCHEDULES:

SCHEDULE A-5 –SURFACE LIFT IRRIGATION SCHEME

NOTE: The scheme has to be enumerated only when it is meant for irrigation and is complete. A scheme may be considered as surface lift scheme if the major part of irrigation is done through lifting the surface water. These schemes are similar to those of diversion schemes, but in addition pumps are installed and pump houses constructed. In regions, where the topography does not permit direct flow irrigation from rivers and streams, water has to be lifted in to the irrigation channels.

Column 1: All schemes in the villages are to be serially numbered to ensure that no one is missed. Serial no. of the scheme in the village is to be noted under this column.

Column2 (a): The owner of the scheme may be a farmer/cooperative society/government department/organisations/group of farmers. The name of the owner is to be indicated in this column. In case of absentees, it may be enquired from the neighbour of the person who is in possession of the scheme and the appropriate code number be noted as indicated below:

Code no: Description

1. Government owned
2. Cooperative society
3. Panchayat
4. Owned by group of farmers
5. Owned by private (farmers himself)
6. Others.

Column 2(b): Khasra no./plot/survey no. in which the scheme is installed be noted in the Column for physical verification etc. which may be needed at a later date.

Column 3: Under this column size of ownership holding is to be considered. Ownership holding will not include the land leased in or leased out from/to the other farmers for cultivation by the owner of the scheme. The appropriate code number. be noted as given below:-

Code no. Holding size

1. 0-1 ha. (Marginal farmers)

2. 1-2 ha. (Small farmers)
3. 2-10 ha. (Medium farmers)
4. More than 10 ha. (Big farmers)

Column 4: Appropriate code no. would be indicated under it for scheduled castes or scheduled tribes, others as the case may be as given below:

Code no.: Social status

1. Scheduled castes
2. Scheduled tribe
3. Others.

Column 5: Appropriate code no. for the year of commissioning of the scheme should be mentioned. The schemes which were installed during 1986-87 or before are to be indicated with code no. '1' only. Codes are given below:

Code no. Year of commissioning

1. On or before 1986-87
2. 1987-88
3. 1988-89
4. 1989-90
5. 1990-91
6. 1991-92
7. 1992-93
8. 1993-94

Col. 6: Appropriate code no. may be indicated as per the codes given below:-

Code no. Type of scheme

1. Lift on river
2. Lift on stream
3. Lift on drain canal
4. Lift on tank/pond

Column 7: The purpose is to know whether the scheme is in use at present or not. The appropriate code no. be noted as given below:-

Code no. Status of scheme

1. In use: If scheme is presently (i.e. during 1993-94) being used for irrigation.
2. Not in use: Temporary: If the scheme is not in use for the last 2 years but has not been abandoned.
3. Not in use: Permanent: (1) Due to saline water
(2) Due to dry-up
(3) Due to sinking
(4) Others

Column 8: It is intended to find out the sources of financing the scheme which could be through farmer's own savings, bank loan or government subsidies. It may be indicated as any of the following alternatives and appropriate code no. be noted.

Code no. Source of finance

1. Own saving of farmer
2. With the help of bank loan
3. Government subsidy and bank loan

4. Others.

Column9: Farmers are adopting different types of water conveyance channels and irrigation methods. Recently, sprinkler and drip irrigation methods have gained popularity among the farmers besides continuing conventional methods of ground water channel; underground waters channels, etc. Appropriate code (s) are to be indicated for the water distribution devices being used by the farmers and indicated below:

Code no.: Device used or scheme.

1. Sprinkler set
2. Drip irrigation
3. Open water channel
4. Underground channel excluding drip and sprinkler
5. Others.

Column 10 to 13: Length of the channel is to be recorded in metres under these columns In a scheme, there can be pucca channel, kuchha channel or underground channel or even a combination of these.

Column14: The device used for lifting water from the scheme is to be indicated by appropriate code no. as given below:

Code no.: Lifting devices

1. Electric pump
2. Diesel pump
3. Wind mills
4. Solar pump
5. Others.

Column 15: Record the Horse Power (HP) of the prime mover used for lifting water.

Column 16: It is to be noted that on an average, for how many hours per day, the water is being pumped out from the well during peak days of a season.

Column 17: Under this column the area which is proposed to be irrigated by the dug well should be indicated in ha. It is generally the measurement of the field proposed to be irrigated by the scheme at the time of installation. In case the scheme is very old and the culturable command area is not available, the current maximum culturable command area of the scheme has to be noted.

Column 18: Whether the scheme is located in the command of major/medium scheme like canal.

Code no.

1. Yes
2. No.

Col. 18 to 23: It is intended to find out the gross potential created from the scheme. It will indicate the area under kharif, rabi, perennial and other crops is proposed to be irrigated. The total of column 19 to 22 is to be noted in column23. The figure under columns 19,20,21 and 22 should be season wise area proposed to be irrigated by the scheme. If the well has been improved upon or augmented, the revised potential is to be indicated. Column 23 will indicate the gross irrigation potential created. The figure in column 23 would certainly be higher or equal to the CCA reported in column 17.

Column 24 to 28: In these columns, the area actually irrigated during kharif, rabi, perennial and other crops is to be indicated. The area irrigated under different seasons may be taken for the year 1993-94, i.e. commencing kharif in 1993 and ending rabi in 1994. Column 28 will indicate the gross

irrigation potential utilised. Figure in column 28 would be less than or equal to the figure in column 23.

Column 29 to 33: Some of the minor irrigation wells are located in the command of major/medium irrigation projects. And thus, they serve the purpose of supplementary irrigation. In order to access the extent of such supplementary irrigation, data is to be recorded under column 29 to 33, regarding area which has also received irrigation from major/medium sources during the same crop season and that area is to be recorded season wise.

Column 34: The idea is to find out the reason for the short fall between the figures under the columns 23 and 28. The appropriate code no. as mentioned below be noted:

Code no. Constraints

1. Non availability of adequate power
2. Mechanical break down of lifting devices
3. Less discharge of water
4. Siltation of the canal/storage etc.
5. Breakdown of the channel
6. Others.

VILLAGE SCHEDULE
PRIMARY SCHEDULE FOR CANVASSING VILLAGE SCHEDULE

1. IDENTIFICATION:

Name of the State Name of the District Name of the Block Date of Enumeration
with code in () with code in () with code in ()

2. SPECIFIC INFORMATION

Name of the Village with Code in ()	Geographical area (ha.)	Cultivable area (ha.)	Net Area sown(ha.)	Average ground water level in metres	Major & medium schemes	Ground water schemes
1	2	3	4	5	6	7

Net area irrigated through

Major and medium schemes	Ground water schemes	Surface water scheme	Total
8	9	10	11

Checked by:
Name and Designation of
Supervisory officer:

Signature of Enumerator:
Name and Designation of
Enumerator

INSTRUCTIONS FOR FILLING UP THE PRIMARY VILLAGE SCHEDULE

NOTE:

The information is to be collected by the primary enumerators through patwaris and their records or village level workers with their records or similar agencies providing village level data to government agencies.

IDENTIFICATION: The standard codes of the state, district and block are required to be noted in the respective columns.

SPECIFIC INFORMATION:

Column 1: The name of the village is to be recorded in this column by the enumerators.

Column 2: The geographical area of the village as available in the revenue records is to be noted under this column.

Column 3: The cultivable area of the village which includes the net area sown during 1993-94 and the current fallow will constitute the cultivable area of the village.

Column 4: The net area of the village sown during the agriculture year 1993-94 is to be recorded under this column. The year is commencing from kharif 1993-July 1993 and ending with rabi 1994 (June 1994).

Column 5: The average ground water level in meters is to be recorded under this column. The enquiry in this regard may be made by patwari/village level worker, etc. It is actually the depth of the water level in the wells of the village from the ground.

Column. 6 to 9: In these columns, net area irrigated during 1993-94 by major and medium schemes (irrigation scheme having CCA of more than 2000 hectares) by ground water schemes (dug wells, tube wells etc.) and other scheme along with the total is to be recorded under these columns. Naturally, the ground water schemes and other schemes would be the minor irrigation schemes only.

MISCELLANEOUS TABLES

MINOR IRRIGATION CENSUS (1993-94)

Table I - Irrigation Potential Created/Utilised through Minor Irrigation Schemes

(in '000 Ha)

S.NO.	STATE	GROUND WATER			SURFACE WATER			TOTAL		
		Utilisable \$	Potential created	Potential utilised	Utilisable	Potential created	Potential utilised	Utilisable \$	Potential created	Potential utilised
1	2	3	4	5	6	7	8	9	10	11
1.	ANDHRA PRADESH	3960.00	2784.22	1985.11	2300.00	1857.03	1066.51	6260.00	4641.25	3051.62
2.	ARUNACHAL PRADESH	18.00	.00	.00	150.00	50.12	27.81	168.00	50.12	27.81
3.	ASSAM	900.00	118.58	51.05	1000.00	300.06	138.50	1900.00	418.64	189.55
4.	BIHAR	4947.00	3277.98	2280.51	1900.00	869.35	535.73	6847.00	4147.33	2816.24
5.	GOA	29.00	3.94	3.52	25.00	14.01	13.19	54.00	17.95	16.71
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	1462.00	2269.28#	2152.92#	50.00	4.94	4.89	1512.00	2274.22#	2157.81#
8.	HIMACHAL PRADESH	68.00	20.99	18.64	235.00	172.44	150.96	303.00	193.43	169.60
9.	JAMMU & KASHMIR	708.00	8.40	8.15	400.00	347.35	327.02	1108.00	355.75	335.17
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	879.00	90.11	82.87	800.00	333.90	292.07	1679.00	424.01	374.94
12.	MADHYA PRADESH	9732.00	3584.20	2601.07	2200.00	1544.87	1031.64	11932.00	5129.07	3632.71
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	369.00	.31	.20	100.00	30.30	18.15	469.00	30.61	18.35
15.	MEGHALAYA	63.00	.78	.34	85.00	75.73	42.88	148.00	76.51	43.22
16.	MIZORAM	5.00	.83	.62	70.00	6.80	5.72	75.00	7.63	6.34
17.	NAGALAND	5.00	.93	.34	75.00	64.79	38.30	80.00	65.72	38.64
18.	ORISSA	4203.00	419.32	160.12	1000.00	981.64	543.76	5203.00	1400.96	703.88
19.	PUNJAB	2917.00	6754.64#	6138.01#	50.00	22.33	12.98	2967.00	6776.97#	6150.99#
20.	RAJASTHAN	1778.00	3979.81#	3499.97#	600.00	152.79	114.38	2378.00	4132.60#	3614.35#
21.	SIKKIM	.00	.00	.00	50.00	20.02	12.50	50.00	20.02	12.50
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	81.00	6.28	4.66	100.00	34.64	27.71	181.00	40.92	32.37
24.	UTTAR PRADESH	16799.00	12056.81	9752.99	1200.00	300.54	237.11	17999.00	12357.35	9990.10
25.	WEST BENGAL	3318.00	1841.66	1332.54	1300.00	955.72	603.53	4618.00	2797.38	1936.07
26.	ANDAMAN & NICOBARS	.00	.00	.00	15.00	2.00	1.10	15.00	2.00	1.10
27.	DADRA & NAGAR HAVELI	5.00	.85	.74	5.00	.69	.62	10.00	1.54	1.36
28.	DELHI	111.00	51.30	49.48	10.00	6.55	6.43	121.00	57.85	55.91
29.	PONDICHERRY	.00	10.37	9.73	5.00	13.82	11.49	5.00	24.19	21.22
Total:		52357.00	37281.58	30133.58	13725.00	8162.43	5264.98	66082.00	45444.01	35398.56

Utilisable Irrigation Potential is 90% of the Ultimate Irrigation Potential.

Irrigation Potential created & utilised in excess of utilisable irrigation potential is due to over exploited annual replenishable ground water. In case of Haryana, Punjab and Rajasthan states out of 108, 118, and 236 total Blocks; 51, 70 and 56 blocks respectively are either over exploited or dark Blocks & exploitation of Static reserves have been reported in these States.

MINOR IRRIGATION CENSUS (1993-94)

Table II - Irrigation Potential Created/Utilised through Ground Water Schemes in use

(in Ha.)

S.NO.	STATE	DUG WELLS			SHALLOW TUBEWELLS			DEEP TUBEWELL			TOTAL		
		Number in use	Potential created	Potential utilised	Number in use	Potential created	Potential utilised	Number in use	Potential created	Potential utilised	Number in use	Potential created	Potential tilised
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	ANDHRA PRADESH	1018370	1616083	1245166	304358	723286	617978	29839	143417	121969	1352567	2482786	1985113
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0	0	0	0	0
3.	ASSAM	28	83	47	20158	68084	42240	387	17940	8762	20573	86107	51049
4.	BIHAR	354682	433551	324653	575252	2509887	1878875	4398	141951	76977	934332	3085389	2280505
5.	GOA	3888	3837	3438	26	52	36	12	49	45	3926	3938	3519
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	26252	120899\$	120899\$	492159	2110033	1994307	6377	38217	37712	524788	2269149	2152918
8.	HIMACHAL PRAD	1703	5197	4527	1604	6909	6346	229	8559	7764	3536	20665	18637
9.	JAMMU & KASHMIR	1403	1277	1118	1302	3126	3050	97	3992	3987	2802	8395	8155
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	126536	85648	79311	2344	2951	2848	193	809	708	129073	89408	82867
12.	MADHYA PRADESH	1070280	2740071	2020727	119243	638153	497546	23014	124750	82801	1212537	3502974	2601074
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	0	0	36	308	195	0	0	0	36	308	195
15.	MEGHALAYA	2	12	11	110	406	79	6	359	247	118	777	337
16.	MIZORAM	403	724	615	0	0	0	0	0	0	403	724	615
17.	NAGALAND	232	575	322	6	26	15	2	10	6	240	611	343
18.	ORISSA	266403	162138	91785	15284	107397	54203	1866	54011	14130	283553	323546	160118
19.	PUNJAB	11511	94677\$	79300\$	938503	6556852	6022316	2233	46023	36397	952247	6697552	6138013
20.	RAJASTHAN	820032	3413598\$	3086494\$	58595	278724	275084	11726	151619	138391	890353	3843941	3499969
21.	SIKKIM	0	0	0	0	0	0	0	0	0	0	0	0
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	800	1619	1121	113	413	399	119	3776	3144	1032	5808	4664
24.	UTTAR PRADESH	121825	446156	344552	1972140	10477684	8652108	11052	977521	756332	2105017	11901361	9752992
25.	WEST BENGAL	49862	33307	22460	489162	1482351	1179666	3509	225447	130418	542533	1741105	1332544
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	409	849	742	0	0	0	0	0	0	409	849	742
28.	DELHI	0	0	0	8984	43993	42814	686	7050	6668	9670	51043	49482
29.	PONDICHERY	191	394	393	3643	8146	7922	412	1421	1413	4246	9961	9728
Total:		3874812	9160695	7427681	5003022	25018781	21278027	96157	1946921	1427871	8973991	36126397	30133579

\$ Dugwells are converted into Shallow tube wells fitted with energised pumps.

MINOR IRRIGATION CENSUS (1993-94)

Table III - Irrigation Potential Created/Utilised through Surface Water Schemes in use

(in ha)

S.NO.	STATE	SURFACE FLOW SCHEMES			SURFACE LIFT SCHEMES			TOTAL		
		Number in use	Potential created	Potential utilised	Number in use	Potential created	Potential utilised	Number in use	Potential created	Potential utilised
1	2	3	4	5	6	7	8	9	10	11
1.	ANDHRA PRADESH	50766	1214960	929694	18812	178152	136820	69578	1393112	1066514
2.	ARUNACHAL PRADESH	2994	39533	27812	0	0	0	2994	39533	27812
3.	ASSAM	2201	140136	88832	7564	109733	49672	9765	249869	138504
4.	BIHAR	59992	684414	491906	9031	73557	43820	69023	757971	535726
5.	GOA	3110	9812	9483	746	4159	3705	3856	13971	13188
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	507	3515	3465	182	1424	1424	689	4939	4889
8.	HIMACHAL PRADESH	13921	151418	137991	536	15981	12972	14457	167399	150963
9.	JAMMU & KASHMIR	9113	312782	295340	325	34569	31679	9438	347351	327019
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	10094	230276	199459	11253	99771	92612	21347	330047	292071
12.	MADHYA PRADESH	53578	650027	428819	186928	824902	602821	240506	1474929	1031640
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	240	26852	16104	20	3450	2049	260	30302	18153
15.	MEGHALAYA	12363	57034	41734	8	1985	1141	12371	59019	42875
16.	MIZORAM	4389	5985	5559	12	160	160	4401	6145	5719
17.	NAGALAND	13119	61314	38088	19	293	212	13138	61607	38300
18.	ORISSA	21807	653792	431223	18197	216702	112540	40004	870494	543763
19.	PUNJAB	390	6753	4206	764	12077	8773	1154	18830	12979
20.	RAJASTHAN	2170	126287	105584	280	10124	8795	2450	136411	114379
21.	SIKKIM	766	15729	12503	0	0	0	766	15729	12503
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	587	8357	7342	800	25489	20372	1387	33846	27714
24.	UTTAR PRADESH	17568	230104	199188	3188	44047	37925	20756	274151	237113
25.	WEST BENGAL	61892	433983	317026	76301	454994	286506	138193	888977	603532
26.	ANDAMAN & NICOBARS	0	0	0	942	1628	1099	942	1628	1099
27.	DADRA & NAGAR HAVELI	11	115	99	53	568	517	64	683	616
28.	DELHI	1372	6499	6431	0	0	0	1372	6499	6431
29.	PONDICHERRY	17641	13486	11161	405	333	330	18046	13819	11491
Total:		360591	6083163	3809049	336366	2114098	1455944	696957	8197261	5264993

MINOR IRRIGATION CENSUS (1993-94)

Table IV - Irrigation Potential Created/Utilised through Minor Irrigation Schemes in use

(in Ha)

S.NO.	STATE	GROUND WATER SCHEMES			SURFACE WATER SCHEMES			TOTAL		
		Number in use	Potential created	Potential utilised	Number in use	Potential created	Potential utilised	Number in use	Potential created	Potential utilised
1	2	3	4	5	6	7	8	9	10	11
1.	ANDHRA PRADESH	1352567	2482786	1985113	69578	1393112	1066514	1422145	3875898	3051627
2.	ARUNACHAL PRADESH	0	0	0	2994	39533	27812	2994	39533	27812
3.	ASSAM	20573	86107	51049	9765	249869	138504	30338	335976	189553
4.	BIHAR	934332	3085389	2280505	69023	757971	535726	1003355	3843360	2816231
5.	GOA	3926	3938	3519	3856	13971	13188	7782	17909	16707
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	524788	2269149	2152918	689	4939	4889	525477	2274088	2157807
8.	HIMACHAL PRADESH	3536	20665	18637	14457	167399	150963	17993	188064	169600
9.	JAMMU & KASHMIR	2802	8395	8155	9438	347351	327019	12240	355746	335174
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	129073	89408	82867	21347	330047	292071	150420	419455	374938
12.	MADHYA PRADESH	1212537	3502974	2601074	240506	1474929	1031640	1453043	4977903	3632714
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	36	308	195	260	30302	18153	296	30610	18348
15.	MEGHALAYA	118	777	337	12371	59019	42875	12489	59796	43212
16.	MIZORAM	403	724	615	4401	6145	5719	4804	6869	6334
17.	NAGALAND	240	611	343	13138	61607	38300	13378	62218	38643
18.	ORISSA	283553	323546	160118	40004	870494	543763	323557	1194040	703881
19.	PUNJAB	952247	6697552	6138013	1154	18830	12979	953401	6716382	6150992
20.	RAJASTHAN	890353	3843941	3499969	2450	136411	114379	892803	3980352	3614348
21.	SIKKIM	0	0	0	766	15729	12503	766	15729	12503
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	1032	5808	4664	1387	33846	27714	2419	39654	32378
24.	UTTAR PRADESH	2105017	11901361	9752992	20756	274151	237113	2125773	12175512	9990105
25.	WEST BENGAL	542533	1741105	1332544	138193	888977	603532	680726	2630082	1936076
26.	ANDAMAN & NICOBARS	0	0	0	942	1628	1099	942	1628	1099
27.	DADRA & NAGAR HAVELI	409	849	742	64	683	616	473	1532	1358
28.	DELHI	9670	51043	49482	1372	6499	6431	11042	57542	55913
29.	PONDICHERRY	4246	9961	9728	18046	13819	11491	22292	23780	21219
Total:		8973991	36126397	30133579	696957	7197261	5264993	9670948	43323658	35398572

MINOR IRRIGATION CENSUS (1993-94)

Table V - No. of Ground Water Schemes not in use and Area benefit lost

(in Ha)							
S.NO.	STATE	DUG WELLS			SHALLOW TUBEWELLS		
		Number not in use	CCA	Potential created	Number not in use	CCA	Potential created
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	198042	207106	270800	12839	19777	25409
2.	ARUNACHAL PRADESH	0	0	0	0	0	0
3.	ASSAM	10	21	29	6914	14966	23029
4.	BIHAR	36516	26822	40074	14267	39592	55235
5.	GOA	87	26	27	2	0	0
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	188	0	0	2135	0	40
8.	HIMACHAL PRADESH	19	17	33	20	136	260
9.	JAMMU & KASHMIR	22	0	0	11	0	0
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	159	345	523	20	10	13
12.	MADHYA PRADESH	56159	63339	70357	2261	5984	6806
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	0	0	0	0	0
15.	MEGHALAYA	0	0	0	0	0	0
16.	MIZORAM	87	105	108	0	0	0
17.	NAGALAND	298	305	316	0	0	0
18.	ORISSA	56694	27134	43805	2811	12707	23853
19.	PUNJAB	160	510	1008	5706	25636	54430
20.	RAJASTHAN	223045	79795	128908	4504	2477	2608
21.	SIKKIM	0	0	0	0	0	0
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	5	8	17	23	165	176
24.	UTTAR PRADESH	14499	20236	25540	10426	46224	78738
25.	WEST BENGAL	6121	3810	6572	15476	39840	61235
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	4	3	5	0	0	0
28.	DELHI	0	0	0	36	92	171
29.	PONDICHERRY	31	13	34	252	280	368
Total :		592146	429595	588156	77703	207886	332371

Table V (contd.) - No. of Ground Water Schemes not in use and Area benefit lost

		(in Ha)					
S.NO.	STATE	DEEP TUBEWELL			TOTAL		
		Number not in use	CCA	Potential created	Number not in use	CCA	Potential created
1	2	9	10	11	12	13	14
1.	ANDHRA PRADESH	1377	3931	5228	212258	230814	301437
2.	ARUNACHAL PRADESH	0	0	0	0	0	0
3.	ASSAM	205	6724	9410	7129	21711	32468
4.	BIHAR	2042	60692	97280	52825	127106	192589
5.	GOA	7	0	0	96	26	27
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	37	88	92	2360	88	132
8.	HIMACHAL PRADESH	1	15	30	40	168	323
9.	JAMMU & KASHMIR	0	0	0	33	0	0
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	5	106	170	184	461	706
12.	MADHYA PRADESH	1437	2933	4067	59857	72256	81230
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	0	0	0	0	0
15.	MEGHALAYA	1	20	22	1	20	22
16.	MIZORAM	0	0	0	87	105	108
17.	NAGALAND	1	4	4	299	309	320
18.	ORISSA	1045	17180	28120	60550	57021	95778
19.	PUNJAB	44	1079	1647	5910	27225	57085
20.	RAJASTHAN	824	4012	4351	228373	86284	135867
21.	SIKKIM	0	0	0	0	0	0
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	12	279	279	40	452	472
24.	UTTAR PRADESH	573	23169	51167	25498	89629	155445
25.	WEST BENGAL	530	18997	32745	22127	62647	100552
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	4	3	5
28.	DELHI	5	57	85	41	149	256
29.	PONDICHERRY	6	10	10	289	303	412
Total :		8152	139296	234707	678001	776777	1155234

MINOR IRRIGATION CENSUS (1993-94)

Table VI - No. of Surface Water Schemes not in use and area benefit lost

(in Ha)							
S.NO.	STATE	SURFACE FLOW SCHEME			SURFACE LIFE SCHEME		
		Number not in use	CCA	Potential created	Number not in use	CCA	Potential created
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	29187	373159	453913	614	7852	10003
2.	ARUNACHAL PRADESH	594	8556	10588	0	0	0
3.	ASSAM	146	9747	11182	1546	29149	39007
4.	BIHAR	7256	57233	66204	2035	29091	45178
5.	GOA	66	30	31	6	2	4
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	3	0	0	0	0	0
8.	HIMACHAL PRADESH	424	2060	3782	21	638	1258
9.	JAMMU & KASHMIR	31	0	0	26	0	0
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	287	2475	3694	11	115	163
12.	MADHYA PRADESH	2546	18734	21758	1947	18490	48184
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	0	0	0	0	0
15.	MEGHALAYA	1901	12912	15685	7	985	1029
16.	MIZORAM	386	644	657	0	0	0
17.	NAGALAND	940	3121	3180	0	0	0
18.	ORISSA	2296	37432	44546	2407	45872	66598
19.	PUNJAB	4	2844	3498	0	0	0
20.	RAJASTHAN	932	13371	15824	9	550	550
21.	SIKKIM	88	3699	4290	0	0	0
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	13	105	107	29	675	690
24.	UTTAR PRADESH	6316	15518	24421	278	1476	1968
25.	WEST BENGAL	4562	21321	25057	7344	28476	41688
26.	ANDAMAN & NICOBARS	0	0	0	268	313	376
27.	DADRA & NAGAR HAVELI	0	0	0	1	1	2
28.	DELHI	11	25	47	0	0	0
29.	PONDICHERRY	4	2	2	1	0	0
Total :		57993	582988	708466	16550	163685	256698

Table VI (contd.) - Total No. of Surface Water Schemes not in use and area benefit lost
(in Ha)

S.NO.	STATE	TOTAL (SURFACE FLOW + SURFACE LIFT)		
		Number not in use	CCA	Potential created
1	2	9	10	11
1.	ANDHRA PRADESH	29801	381011	463916
2.	ARUNACHAL PRADESH	594	8556	10588
3.	ASSAM	1692	38896	50189
4.	BIHAR	9291	86324	111382
5.	GOA	72	32	35
6.	GUJARAT	N.A.	N.A.	N.A.
7.	HARYANA	3	0	0
8.	HIMACHAL PRADESH	445	2698	5040
9.	JAMMU & KASHMIR	57	0	0
10.	KARNATAKA	N.A.	N.A.	N.A.
11.	KERALA	298	2590	3857
12.	MADHYA PRADESH	4493	37224	69942
13.	MAHARASHTRA	N.A.	N.A.	N.A.
14.	MANIPUR	0	0	0
15.	MEGHALAYA	1908	13897	16714
16.	MIZORAM	386	644	657
17.	NAGALAND	940	3121	3180
18.	ORISSA	4703	83304	111144
19.	PUNJAB	4	2844	3498
20.	RAJASTHAN	941	13921	16374
21.	SIKKIM	88	3699	4290
22.	TAMIL NADU	N.A.	N.A.	N.A.
23.	TRIPURA	42	780	797
24.	UTTAR PRADESH	6594	16994	26389
25.	WEST BENGAL	11906	49797	66745
26.	ANDAMAN & NICOBARS	268	313	376
27.	DADRA & NAGAR HAVELI	1	1	2
28.	DELHI	11	25	47
29.	PONDICHERRY	5	2	2
Total :		74543	746673	965164

MINOR IRRIGATION CENSUS (1993-94)

Table VII - No. of Minor Irrigation Schemes not in use and Area benefit lost

(in Ha)

S.NO.	STATE	GROUND WATER			SURFACE WATER			TOTAL		
		Number not in use	CCA	Potential created	Number not in use	CCA	Potential created	Number not in use	CCA	Potential created
1	2	3	4	5	6	7	8	9	10	11
1.	ANDHRA PRADESH	212258	230814	301437	29801	381011	463916	242059	611825	765353
2.	ARUNACHAL PRADESH	0	0	0	594	8556	10588	594	8556	10588
3.	ASSAM	7129	21711	32468	1692	38896	50189	8821	60607	82657
4.	BIHAR	52825	127106	192589	9291	86324	111382	62116	213430	303971
5.	GOA	96	26	27	72	32	35	168	58	62
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	2360	88	132	3	0	0	2363	88	132
8.	HIMACHAL PRADESH	40	168	323	445	2698	5040	485	2866	5363
9.	JAMMU & KASHMIR	33	0	0	57	0	0	90	0	0
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	184	461	706	298	2590	3857	482	3051	4563
12.	MADHYA PRADESH	59857	72256	81230	4493	37224	69942	64350	109480	151172
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	0	0	0	0	0	0	0	0
15.	MEGHALAYA	1	20	22	1908	13897	16714	1909	13917	16736
16.	MIZORAM	87	105	108	386	644	657	473	749	765
17.	NAGALAND	299	309	320	940	3121	3180	1239	3430	3500
18.	ORISSA	60550	57021	95778	4703	83304	111144	65253	140325	206922
19.	PUNJAB	5910	27225	57085	4	2844	3498	5914	30069	60583
20.	RAJASTHAN	228373	86284	135867	941	13921	16374	229314	100205	152241
21.	SIKKIM	0	0	0	88	3699	4290	88	3699	4290
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	40	452	472	42	780	797	82	1232	1269
24.	UTTAR PRADESH	25498	89629	155445	6594	16994	26389	32092	106623	181834
25.	WEST BENGAL	22127	62647	100552	11906	49797	66745	34033	112444	167297
26.	ANDAMAN & NICOBARS	0	0	0	268	313	376	268	313	376
27.	DADRA & NAGAR HAVELI	4	3	5	1	1	2	5	4	7
28.	DELHI	41	149	256	11	25	47	52	174	303
29.	PONDICHERRY	289	303	412	5	2	2	294	305	414
Total:		678001	776777	1155234	74543	746673	965164	752544	1523450	2120398

MINOR IRRIGATION CENSUS (1993-94)

Table VIII - Cropwise Area irrigated by Ground Water Schemes

(in Ha)

S.NO.	STATE	DUG WELLS					SHALLOW TUBEWELLS				
		Khariif	Rabi	Perennial	Others	Total	Khariif	Rabi	Perennial	Others	Total
		3	4	5	6	7	8	9	10	11	12
1.	ANDHRA PRADESH	676518	499160	58911	10577	1245166	313907	218410	71387	14274	617978
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0	0	0
3.	ASSAM	30	16	0	1	47	26423	14890	33	894	42240
4.	BIHAR	139148	160852	15819	8834	324653	672961	1057623	80881	67410	1878875
5.	GOA	9	935	2086	408	3438	0	1	33	2	36
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	60448	60451	0	0	120899	997149	997158	0	0	1994307
8.	HIMACHAL PRADESH	1993	2465	47	22	4527	2049	4205	65	27	6346
9.	JAMMU & KASHMIR	585	533	0	0	1118	1557	1493	0	0	3050
10.	KARNATAKA	253822	142622	76177	28334	500955	94495	42770	30353	11102	178720
11.	KERALA	8866	9583	47369	13493	79311	400	298	857	1293	2848
12.	MADHYA PRADESH	221083	1776693	18507	4444	2020727	39270	451889	2110	4277	497546
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	0	0	0	0	0	195	0	0	195
15.	MEGHALAYA	6	5	0	0	11	59	16	4	0	79
16.	MIZORAM	362	247	6	0	615	0	0	0	0	0
17.	NAGALAND	234	87	1	0	322	9	6	0	0	15
18.	ORISSA	45880	36847	7912	1146	91785	17013	30747	6276	167	54203
19.	PUNJAB	36168	41364	1191	577	79300	2865870	2978213	112745	65488	6022316
20.	RAJASTHAN	160598	2870268	23905	31723	3086494	3139	271110	548	287	275084
21.	SIKKIM	0	0	0	0	0	0	0	0	0	0
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	410	649	14	48	1121	266	115	3	15	399
24.	UTTAR PRADESH	72550	227057	19201	25744	344552	3190443	4051540	1004591	405534	8652108
25.	WEST BENGAL	8115	12111	732	1502	22460	410082	411361	26245	331978	1179666
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	393	170	157	22	742	0	0	0	0	0
28.	DELHI	0	0	0	0	0	18332	24411	67	4	42814
29.	PONDICHERRY	136	174	66	17	393	3501	2538	1415	468	7922
Total :		1687354	5842289	272101	126892	7928636	8656925	10558989	1337613	903220	2145647

Table VIII (contd.) - Cropwise Area irrigated by Ground Water Schemes

(in Ha)

S.NO.	STATE	DEEP TUBEWELLS					TOTAL				
		Kharif	Rabi	Perennial	Others	Total	Kharif	Rabi	Perennial	Others	Total
		13	14	15	16	17	18	19	20	21	22
1.	ANDHRA PRADESH	60481	46125	9968	5395	121969	1050906	763695	140266	30246	1985113
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0	0	0
3.	ASSAM	5777	2821	29	135	8762	32230	17727	62	1030	51049
4.	BIHAR	31269	39436	4226	2046	76977	843378	1257911	100926	78290	2280505
5.	GOA	0	12	33	0	45	9	948	2152	410	3519
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	18803	18907	2	0	37712	1076400	1076516	2	0	2152918
8.	HIMACHAL PRADESH	3133	4564	60	7	7764	7175	11234	172	56	18637
9.	JAMMU & KASHMIR	2333	1654	0	0	3987	4475	3680	0	0	8155
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	81	92	403	132	708	9347	9973	48629	14918	82867
12.	MADHYA PRADESH	15058	65445	1580	718	82801	275411	2294027	22197	9439	2601074
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	0	0	0	0	0	195	0	0	195
15.	MEGHALAYA	143	95	1	8	247	208	116	5	8	337
16.	MIZORAM	0	0	0	0	0	362	247	6	0	615
17.	NAGALAND	2	3	1	0	6	245	96	2	0	343
18.	ORISSA	1979	12017	117	17	14130	64872	79611	14305	1330	160118
19.	PUNJAB	16749	18390	877	381	36397	2918787	3037967	114813	66448	6138013
20.	RAJASTHAN	12469	123451	375	2096	138391	176206	3264829	24828	34106	3499969
21.	SIKKIM	0	0	0	0	0	0	0	0	0	0
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	1345	1657	53	89	3144	2021	2421	70	152	4664
24.	UTTAR PRADESH	259872	392973	78740	24747	756332	3522865	4671570	1102532	456025	9752992
25.	WEST BENGAL	51995	43838	5051	29534	130418	470192	467310	32028	363014	1332544
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	393	170	157	22	742
28.	DELHI	3291	3340	31	6	6668	21623	27751	98	10	49482
29.	PONDICHERRY	436	471	461	45	1413	4073	3183	1942	530	9728
Total :		485216	775291	102008	65356	1427871	10481178	16991177	1605192	1056032	30133579

MINOR IRRIGATION CENSUS (1993-94)

Table IX - Cropwise Area irrigated by Surface Water Minor Irrigation Schemes

(in Ha)

S.NO.	STATE	SURFACE FLOW SCHEMES					SURFACE LIFT SCHEMES				
		Khariif	Rabi	Perennial	Others	Total	Khariif	Rabi	Perennial	Others	Total
		3	4	5	6	7	8	9	10	11	12
1.	ANDHRA PRADESH	672887	243528	12572	707	929694	85926	47980	2523	391	136820
2.	ARUNACHAL PRADESH	25435	1525	186	666	27812	0	0	0	0	0
3.	ASSAM	75992	12012	161	667	88832	31156	17845	63	608	49672
4.	BIHAR	395729	87891	4803	3483	491906	23475	18833	788	724	43820
5.	GOA	284	7585	1489	125	9483	11	410	2969	315	3705
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	1675	1790	0	0	3465	712	712	0	0	1424
8.	HIMACHAL PRADESH	70412	65845	1682	52	137991	5799	6992	160	21	12972
9.	JAMMU & KASHMIR	229712	63428	2200	0	295340	27707	3972	0	0	31679
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	74761	83661	23749	17288	199459	29615	36373	17272	9352	92612
12.	MADHYA PRADESH	238822	180594	8473	930	428819	50179	548460	3647	535	602821
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	12063	3400	0	641	16104	725	951	0	373	2049
15.	MEGHALAYA	31728	7418	1768	820	41734	806	335	0	0	1141
16.	MIZORAM	4699	716	144	0	5559	93	67	0	0	160
17.	NAGALAND	37778	244	57	9	38088	137	75	0	0	212
18.	ORISSA	377246	49474	2810	1693	431223	49015	59712	3505	308	112540
19.	PUNJAB	1638	2483	34	51	4206	4134	4513	17	109	8773
20.	RAJASTHAN	11884	93500	45	155	105584	119	8518	1	157	8795
21.	SIKKIM	7114	3644	1227	518	12503	0	0	0	0	0
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	2403	4622	65	252	7342	9029	9644	611	1088	20372
24.	UTTAR PRADESH	99244	89566	7667	2711	199188	16314	19879	1120	612	37925
25.	WEST BENGAL	191047	96871	6373	22735	317026	90303	136789	10816	48598	286506
26.	ANDAMAN & NICOBARS	0	0	0	0	0	477	356	255	11	1099
27.	DADRA & NAGAR HAVELI	64	27	8	0	99	299	167	41	10	517
28.	DELHI	3004	3424	3	0	6431	0	0	0	0	0
29.	PONDICHERRY	2735	8378	48	0	11161	0	6	0	324	330
Total :		2568356	1111626	75564	53503	3809049	426031	922589	43788	63536	1455944

Table IX (contd.) - Cropwise Area irrigated by Surface Water Minor Irrigation Schemes
(in Ha)

S.NO.	STATE	TOTAL				
		Khariif	Rabi	Perennial	Others	Total
1	2	13	14	15	16	17
1.	ANDHRA PRADESH	758813	291508	15095	1098	1066514
2.	ARUNACHAL PRADESH	25435	1525	186	666	27812
3.	ASSAM	107148	29857	224	1275	138504
4.	BIHAR	419204	106724	5591	4207	535726
5.	GOA	295	7995	4458	440	13188
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	2387	2502	0	0	4889
8.	HIMACHAL PRADESH	76211	72837	1842	73	150963
9.	JAMMU & KASHMIR	257419	67400	2200	0	327019
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	104376	120034	41021	26640	292071
12.	MADHYA PRADESH	289001	729054	12120	1465	1031640
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	12788	4351	0	1014	18153
15.	MEGHALAYA	32534	7753	1768	820	42875
16.	MIZORAM	4792	783	144	0	5719
17.	NAGALAND	37915	319	57	9	38300
18.	ORISSA	426261	109186	6315	2001	543763
19.	PUNJAB	5772	6996	51	160	12979
20.	RAJASTHAN	12003	102018	46	312	114379
21.	SIKKIM	7114	3644	1227	518	12503
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	11432	14266	676	1340	27714
24.	UTTAR PRADESH	115558	109445	8787	3323	237113
25.	WEST BENGAL	281350	233660	17189	71333	603532
26.	ANDAMAN & NICOBARS	477	356	255	11	1099
27.	DADRA & NAGAR HAVELI	363	194	49	10	616
28.	DELHI	3004	3424	3	0	6431
29.	PONDICHERRY	2735	8384	48	324	11491
Total :		2994387	2034215	119352	117039	5264993

MINOR IRRIGATION CENSUS (1993-94)

Table X - Cropwise Area irrigated by Minor Irrigation Schemes

(in Ha)

S.NO.	STATE	GROUND WATER					SURFACE WATER				
		Khariif	Rabi	Perennial	Others	Total	Khariif	Rabi	Perennial	Others	Total
		3	4	5	6	7	8	9	10	11	12
1.	ANDHRA PRADESH	1050906	763695	140266	30246	1985113	758813	291508	15095	1098	1066514
2.	ARUNACHAL PRADESH	0	0	0	0	0	25435	1525	186	666	27812
3.	ASSAM	32230	17727	62	1030	51049	107148	29857	224	1275	138504
4.	BIHAR	843378	1257911	100926	78290	2280505	419204	106724	5591	4207	535726
5.	GOA	9	948	2152	410	3519	295	7995	4458	440	13188
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	1076400	1076516	2	0	2152918	2387	2502	0	0	4889
8.	HIMACHAL PRADESH	7175	11234	172	56	18637	76211	72837	1842	73	150963
9.	JAMMU & KASHMIR	4475	3680	0	0	8155	257419	67400	2200	0	327019
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	9347	9973	48629	14918	82867	104376	120034	41021	26640	292071
12.	MADHYA PRADESH	275411	2294027	22197	9439	2601074	289001	729054	12120	1465	1031640
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	195	0	0	195	12788	4351	0	1014	18153
15.	MEGHALAYA	208	116	5	8	337	32534	7753	1768	820	42875
16.	MIZORAM	362	247	6	0	615	4792	783	144	0	5719
17.	NAGALAND	245	96	2	0	343	37915	319	57	9	38300
18.	ORISSA	64872	79611	14305	1330	160118	426261	109186	6315	2001	543763
19.	PUNJAB	2918787	3037967	114813	66448	6138015	5772	6996	51	160	12979
20.	RAJASTHAN	176206	3264829	24828	34106	3499969	12003	102018	46	312	114379
21.	SIKKIM	0	0	0	0	0	7114	3644	1227	518	12503
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	2021	2421	70	152	4664	11432	14266	676	1340	27714
24.	UTTAR PRADESH	3522865	4671570	1102532	456025	9752992	115558	109445	8787	3323	237113
25.	WEST BENGAL	470192	467310	32028	363014	1332544	281350	233660	17189	71333	603532
26.	ANDAMAN & NICOBARS	0	0	0	0	0	477	356	255	11	1099
27.	DADRA & NAGAR HAVELI	393	170	157	22	742	363	194	49	10	616
28.	DELHI	21623	27751	98	10	49482	3004	3424	3	0	6431
29.	PONDICHERRY	4073	3183	1942	530	9728	2735	8384	48	324	11491
Total :		10481178	16991177	1605192	1056032	30133579	2994387	2034215	119352	117039	5264993

Table X (contd.) - Cropwise Area irrigated by Minor Irrigation Schemes

(in Ha)

S.NO.	STATE	TOTAL				
		Khariif	Rabi	Perennial	Others	Total
1	2	13	14	15	16	17
1.	ANDHRA PRADESH	1809719	1055203	155361	31344	3051627
2.	ARUNACHAL PRADESH	25435	1525	186	666	27812
3.	ASSAM	139378	47584	286	2305	189553
4.	BIHAR	1262582	1364635	106517	82497	2816231
5.	GOA	304	8943	6610	850	16707
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	1078787	1079018	2	0	2157807
8.	HIMACHAL PRADESH	83386	84071	2014	129	169600
9.	JAMMU & KASHMIR	261894	71080	2200	0	335174
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	113723	130007	89650	41558	374938
12.	MADHYA PRADESH	564412	3023081	34317	10904	3632714
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	12788	4546	0	1014	18348
15.	MEGHALAYA	32742	7869	1773	828	43212
16.	MIZORAM	5154	1030	150	0	6334
17.	NAGALAND	38160	415	59	9	38643
18.	ORISSA	491133	188797	20620	3331	703881
19.	PUNJAB	2924559	3044963	114864	66606	6150992
20.	RAJASTHAN	188209	3366847	24874	34418	3614348
21.	SIKKIM	7114	3644	1227	518	12503
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	13453	16687	746	1492	32378
24.	UTTAR PRADESH	3638423	4781015	1111319	459348	9990105
25.	WEST BENGAL	751542	700970	49217	434347	1936076
26.	ANDAMAN & NICOBARS	477	356	255	11	1099
27.	DADRA & NAGAR HAVELI	756	364	206	32	1358
28.	DELHI	24627	31175	101	10	55913
29.	PONDICHERRY	6808	11567	1990	854	21219
Total :		13475565	19025392	1724544	1173071	35398572

MINOR IRRIGATION CENSUS (1993-94)

Table XI - Cropwise Area irrigated by Ground Water Schemes as Supplementary Source of Irrigation

(in Ha)

S.NO.	STATE	DUG WELLS					SHALLOW TUBEWELLS				
		Khariif	Rabi	Perennial	Others	Total	Khariif	Rabi	Perennial	Others	Total
		3	4	5	6	7	8	9	10	11	12
1.	ANDHRA PRADESH	16895	8794	1371	287	27347	42378	18344	6502	1460	68684
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0	0	0
3.	ASSAM	0	0	0	0	0	0	0	0	0	0
4.	BIHAR	9116	14581	728	478	24903	48050	43189	3543	2202	96984
5.	GOA	0	24	170	12	206	0	0	0	0	0
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	9124	10806	0	0	19930	129606	135248	0	0	264854
8.	HIMACHAL PRADESH	0	0	0	0	0	7	7	0	0	14
9.	JAMMU & KASHMIR	60	43	0	0	103	11	10	0	0	21
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	939	1102	234	485	2760	65	91	16	30	202
12.	MADHYA PRADESH	12833	21596	51	577	35057	4745	2783	63	19	7610
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	0	0	0	0	0	0	0	0	0
15.	MEGHALAYA	0	0	0	0	0	5	0	4	0	9
16.	MIZORAM	0	0	0	0	0	0	0	0	0	0
17.	NAGALAND	0	0	0	0	0	0	0	0	0	0
18.	ORISSA	2363	675	2531	65	5634	2650	1272	780	5	4707
19.	PUNJAB	7337	7265	202	93	14897	844027	850528	19819	16150	1730524
20.	RAJASTHAN	890	11678	122	295	12985	162	680	0	0	842
21.	SIKKIM	0	0	0	0	0	0	0	0	0	0
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	0	0	0	0	0	0	0	0	0	0
24.	UTTAR PRADESH	12295	8519	988	453	22255	500622	273322	69815	22990	866749
25.	WEST BENGAL	674	775	52	81	1582	17225	12862	1878	8491	40456
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0	0	0	0	0
28.	DELHI	0	0	0	0	0	0	0	0	0	0
29.	PONDICHERY	0	0	0	0	0	0	0	0	0	0
Total :		72526	85858	6449	2826	167659	1589553	1338336	102420	51347	3081656

Table XI (contd.) - Cropwise Area irrigated by Ground Water Schemes as Supplementary Source of Irrigation

(in Ha)

S.NO.	STATE	DEEP TUBEWELLS					TOTAL				
		Kharrif	Rabi	Perennial	Others	Total	Kharrif	Rabi	Perennial	Others	Total
		13	14	15	16	17	18	19	20	21	22
1.	ANDHRA PRADESH	825	288	267	0	1380	60098	27426	8140	1747	97411
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0	0	0
3.	ASSAM	0	0	0	0	0	0	0	0	0	0
4.	BIHAR	1156	1034	104	51	2345	58322	58804	4375	2731	124232
5.	GOA	0	1	18	0	19	0	25	188	12	225
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	1394	1414	0	0	2808	140124	147468	0	0	287592
8.	HIMACHAL PRADESH	0	0	0	0	0	7	7	0	0	14
9.	JAMMU & KASHMIR	8	8	0	0	16	79	61	0	0	140
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	0	4	0	0	4	1004	1197	250	515	2966
12.	MADHYA PRADESH	255	723	7	8	993	17833	25102	121	604	43660
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	0	0	0	0	0	0	0	0	0
15.	MEGHALAYA	3	0	1	0	4	8	0	5	0	13
16.	MIZORAM	0	0	0	0	0	0	0	0	0	0
17.	NAGALAND	0	0	0	0	0	0	0	0	0	0
18.	ORISSA	345	42	7	2	396	5358	1989	3318	72	10737
19.	PUNJAB	1135	1138	7	0	2280	852499	858931	20028	16243	1747701
20.	RAJASTHAN	48	77	0	0	125	1100	12435	122	295	13952
21.	SIKKIM	0	0	0	0	0	0	0	0	0	0
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	0	0	0	0	0	0	0	0	0	0
24.	UTTAR PRADESH	15929	31993	5878	2090	55890	528846	313834	76681	25533	944894
25.	WEST BENGAL	815	220	17	285	1337	18714	13857	1947	8857	43375
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0	0	0	0	0
28.	DELHI	0	0	0	0	0	0	0	0	0	0
29.	PONDICHERY	0	0	0	0	0	0	0	0	0	0
Total :		21913	36942	6306	2436	67597	1683992	1461136	115175	56609	3316912

MINOR IRRIGATION CENSUS (1993-94)

Table XII - Cropwise Area irrigated by Surface Water Minor Irrigation Schemes as Supplementary Source of Irrigation

(in Ha)

S.NO.	STATE	SURFACE FLOW SCHEMES					SURFACE LIFT SCHEMES				
		Khariif	Rabi	Perennial	Others	Total	Khariif	Rabi	Perennial	Others	Total
		3	4	5	6	7	8	9	10	11	12
1.	ANDHRA PRADESH	63668	25864	805	52	90389	13056	4741	465	43	18305
2.	ARUNACHAL PRADESH	901	88	12	411	1412	0	0	0	0	0
3.	ASSAM	0	0	0	0	0	0	0	0	0	0
4.	BIHAR	34379	16068	945	317	51709	3152	1408	51	37	4648
5.	GOA	11	302	168	9	490	0	27	502	40	569
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	0	0	0	0	0	35	35	0	0	70
8.	HIMACHAL PRADESH	42	41	0	0	83	0	0	0	0	0
9.	JAMMU & KASHMIR	11613	1094	0	0	12707	1740	335	0	0	2075
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	7210	8601	1247	781	17839	1899	2984	1170	1375	7428
12.	MADHYA PRADESH	14155	9292	3730	4	27181	5024	8158	5	14	13201
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	0	0	0	0	0	0	0	0	0
15.	MEGHALAYA	1581	189	58	37	1865	0	0	0	1	1
16.	MIZORAM	2	0	0	0	2	0	0	0	0	0
17.	NAGALAND	0	0	0	0	0	0	0	0	0	0
18.	ORISSA	25127	1587	1201	10	27925	3071	1064	1841	19	5995
19.	PUNJAB	19	19	0	1	39	1481	1504	12	74	3071
20.	RAJASTHAN	1	2488	1	0	2490	0	4	0	0	4
21.	SIKKIM	0	0	0	0	0	0	0	0	0	0
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	16	24	0	0	40	0	0	0	0	0
24.	UTTAR PRADESH	6080	8093	656	239	15068	3756	4608	141	199	8704
25.	WEST BENGAL	23374	8137	721	1481	33713	4122	4464	478	1340	10404
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0	0	0	0	0
28.	DELHI	0	0	0	0	0	0	0	0	0	0
29.	PONDICHERRY	0	0	0	0	0	0	0	0	0	0
Total :		188179	81887	9544	3342	282952	37336	29332	4665	3142	74475

Table XII (contd.) - Cropwise Area irrigated by Surface Water Minor Irrigation Schemes as Supplementary Source of Irrigation

(in Ha)

S.NO.	STATE	TOTAL				
		Kharif	Rabi	Perennial	Others	Total
1	2	13	14	15	16	17
1.	ANDHRA PRADESH	76724	30605	1270	95	108694
2.	ARUNACHAL PRADESH	901	88	12	411	1412
3.	ASSAM	0	0	0	0	0
4.	BIHAR	37531	17476	996	354	56357
5.	GOA	11	329	670	49	1059
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	35	35	0	0	70
8.	HIMACHAL PRADESH	42	41	0	0	83
9.	JAMMU & KASHMIR	13353	1429	0	0	14782
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	9109	11585	2417	2156	25267
12.	MADHYA PRADESH	19179	17450	3735	18	40382
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0
15.	MEGHALAYA	1581	189	58	38	1866
16.	MIZORAM	2	0	0	0	2
17.	NAGALAND	0	0	0	0	0
18.	ORISSA	28198	2651	3042	29	33920
19.	PUNJAB	1500	1523	12	75	3110
20.	RAJASTHAN	1	2492	1	0	2494
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	16	24	0	0	40
24.	UTTAR PRADESH	9836	12701	797	438	23772
25.	WEST BENGAL	27496	12601	1199	2821	44117
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0
28.	DELHI	0	0	0	0	0
29.	PONDICHERRY	0	0	0	0	0
Total :		225515	111219	14209	6484	357427

MINOR IRRIGATION CENSUS (1993-94)

Table XIII - Cropwise Area irrigated by Minor Irrigation Schemes as Supplementary Source of Irrigation

(in Ha)

S.NO.	STATE	GROUND WATER					SURFACE WATER				
		Kharif	Rabi	Perennial	Others	Total	Kharif	Rabi	Perennial	Others	Total
		3	4	5	6	7	8	9	10	11	12
1.	ANDHRA PRADESH	60098	27426	8140	1747	97411	76724	30605	1270	95	108694
2.	ARUNACHAL PRADESH	0	0	0	0	0	901	88	12	411	1412
3.	ASSAM	0	0	0	0	0	0	0	0	0	0
4.	BIHAR	58322	58804	4375	2731	124232	37531	17476	996	354	56357
5.	GOA	0	25	188	12	225	11	329	670	49	1059
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	140124	147468	0	0	287592	35	35	0	0	70
8.	HIMACHAL PRADESH	7	7	0	0	14	42	41	0	0	83
9.	JAMMU & KASHMIR	79	61	0	0	140	13353	1429	0	0	14782
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	1004	1197	250	515	2966	9109	11585	2417	2156	25267
12.	MADHYA PRADESH	17833	25102	121	604	43660	19179	17450	3735	18	40382
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	0	0	0	0	0	0	0	0	0
15.	MEGHALAYA	8	0	5	0	13	1581	189	58	38	1866
16.	MIZORAM	0	0	0	0	0	2	0	0	0	2
17.	NAGALAND	0	0	0	0	0	0	0	0	0	0
18.	ORISSA	5358	1989	3318	72	10737	28198	2651	3042	29	33920
19.	PUNJAB	852499	858931	20028	16243	1747701	1500	1523	12	75	3110
20.	RAJASTHAN	1100	12435	122	295	13952	1	2492	1	0	2494
21.	SIKKIM	0	0	0	0	0	0	0	0	0	0
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	0	0	0	0	0	16	24	0	0	40
24.	UTTAR PRADESH	528846	313834	76681	25533	944894	9836	12701	797	438	23772
25.	WEST BENGAL	18714	13857	1947	8857	43375	27496	12601	1199	2821	44117
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0	0	0	0	0
28.	DELHI	0	0	0	0	0	0	0	0	0	0
29.	PONDICHERRY	0	0	0	0	0	0	0	0	0	0
Total :		1683992	1461136	115175	56609	3316912	225515	111219	14209	6484	357427

Table XIII (contd.) - Cropwise Area irrigated by Minor Irrigation Schemes as Supplementary Source of Irrigation
(in Ha)

S.NO.	STATE	TOTAL				
		Kharif	Rabi	Perennial	Others	Total
1	2	13	14	15	16	17
1.	ANDHRA PRADESH	136822	58031	9410	1842	206105
2.	ARUNACHAL PRADESH	901	88	12	411	1412
3.	ASSAM	0	0	0	0	0
4.	BIHAR	95853	76280	5371	3085	180589
5.	GOA	11	354	858	61	1284
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	140159	147503	0	0	287662
8.	HIMACHAL PRADESH	49	48	0	0	97
9.	JAMMU & KASHMIR	13432	1490	0	0	14922
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	10113	12782	2667	2671	28233
12.	MADHYA PRADESH	37012	42552	3856	622	84042
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	0	0	0	0
15.	MEGHALAYA	1589	189	63	38	1879
16.	MIZORAM	2	0	0	0	2
17.	NAGALAND	0	0	0	0	0
18.	ORISSA	33556	4640	6360	101	44657
19.	PUNJAB	853999	860454	20040	16318	1750811
20.	RAJASTHAN	1101	14927	123	295	16446
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	16	24	0	0	40
24.	UTTAR PRADESH	538682	326535	77478	25971	968666
25.	WEST BENGAL	46210	26458	3146	11678	87492
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0
28.	DELHI	0	0	0	0	0
29.	PONDICHERRY	0	0	0	0	0
Total :		1909507	1572355	129384	63093	3674339

MINOR IRRIGATION CENSUS (1993-94)

Table XIV:- No. of Electrical/Diesel Pumps being used for Minor Irrigation Schemes

(in Nos.)

S.NO.	STATE	ELECTRICAL					DIESEL				
		Dugwell	Shallow Tubewell	Deep Tubewell	Surface Lift	Total	Dugwell	Shallow Tubewell	Deep Tubewell	Surface Lift	Total
1	2	3	4	5	6	7	8	9	10	11	12
1.	ANDHRA PRADESH	980492	296234	31216	16038	1323980	130834	18270	0	3308	152412
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0	0	0
3.	ASSAM	0	410	592	653	1655	28	26657	0	8444	35129
4.	BIHAR	17660	35415	6440	954	60469	148265	547404	0	7329	702998
5.	GOA	2399	26	19	564	3008	275	1	0	111	387
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	19697	341437	6414	170	367718	6448	148206	0	12	154666
8.	HIMACHAL PRADESH	1086	945	230	500	2761	324	661	0	40	1025
9.	JAMMU & KASHMIR	283	1164	97	320	1864	87	149	0	31	267
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	79405	2037	198	7806	89446	14784	254	0	2736	17774
12.	MADHYA PRADESH	920448	117830	24451	133236	1195965	90560	2036	0	48815	141411
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	0	0	9	9	0	23	0	11	34
15.	MEGHALAYA	0	0	7	11	18	0	80	0	3	83
16.	MIZORAM	0	0	0	1	1	0	0	0	11	11
17.	NAGALAND	15	2	3	9	29	176	4	0	10	190
18.	ORISSA	15911	9164	2911	8889	36875	14159	8035	0	2821	25015
19.	PUNJAB	7001	580207	2277	465	589950	3976	353396	0	295	357667
20.	RAJASTHAN	401688	13600	12550	161	427999	421754	48081	0	118	469953
21.	SIKKIM	0	0	0	0	0	0	0	0	0	0
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	3	52	131	397	583	14	1	0	416	431
24.	UTTAR PRADESH	10772	306978	11625	720	330095	112013	1624923	0	2481	1739417
25.	WEST BENGAL	1086	63254	4039	2877	71256	15642	431553	0	62441	509636
26.	ANDAMAN & NICOBARS	0	0	0	77	77	0	0	0	791	791
27.	DADRA & NAGAR HAVELI	180	0	0	45	225	233	0	0	8	241
28.	DELHI	0	8245	691	0	8936	0	754	0	0	754
29.	PONDICHERRY	215	3754	418	6	4393	4	55	0	399	458
Total:		2458341	1780754	104309	173908	4517312	959576	3210543	0	140631	4310750

S.NO.	STATE	TOTAL				
		Dugwell	Shallow Tubewell	Deep Tubewell	Surface Lift	Total
		13	14	15	16	17
1.	ANDHRA PRADESH	1111326	314504	31216	19346	1476392
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	28	27067	592	9097	36784
4.	BIHAR	165925	582819	6440	8283	763467
5.	GOA	2674	27	19	675	3395
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	26145	489643	6414	182	522384
8.	HIMACHAL PRADESH	1410	1606	230	540	3786
9.	JAMMU & KASHMIR	370	1313	97	351	2131
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	94189	2291	198	10542	107220
12.	MADHYA PRADESH	1011008	119866	24451	182051	1337376
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	23	0	20	43
15.	MEGHALAYA	0	80	7	14	101
16.	MIZORAM	0	0	0	12	12
17.	NAGALAND	191	6	3	19	219
18.	ORISSA	30070	17199	2911	11710	61890
19.	PUNJAB	10977	933603	2277	760	947617
20.	RAJASTHAN	823442	61681	12550	279	897952
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	17	53	131	813	1014
24.	UTTAR PRADESH	122785	1931901	11625	3201	2069512
25.	WEST BENGAL	16728	494807	4039	65318	580892
26.	ANDAMAN & NICOBARS	0	0	0	868	868
27.	DADRA & NAGAR HAVELI	413	0	0	53	466
28.	DELHI	0	8999	691	0	9690
29.	PONDICHERRY	219	3809	418	405	4851
Total:		3417917	4991297	104309	314539	8828062

MINOR IRRIGATION CENSUS (1993-94)

Table XV:- No. of Minor Irrigation Schemes under-utilised due to various reasons

S.NO.	STATE	INADEQUATE POWER					MECHANICAL BREAKDOWN				
		Dugwell	Shallow Tubewell	Deep Tubewell	Surface Lift	Total	Dugwell	Shallow Tubewell	Deep Tubewell	Surface Lift	Total
1	2	3	4	5	6	7	8	9	10	11	12
1.	ANDHRA PRADESH	43643	37088	3732	1188	85651	6555	3675	466	183	10879
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0	0	0
3.	ASSAM	5	347	67	183	602	3	2170	33	1005	3211
4.	BIHAR	21735	61607	1171	529	85042	11834	92978	777	379	105968
5.	GOA	138	0	0	89	227	20	0	0	10	30
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	5713	79695	1848	24	87280	507	16707	15	3	17232
8.	HIMACHAL PRADESH	41	34	5	10	90	11	13	3	18	45
9.	JAMMU & KASHMIR	0	0	0	0	0	0	0	0	0	0
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	3836	194	8	328	4366	855	7	6	123	991
12.	MADHYA PRADESH	13142	1781	286	3779	18988	4218	433	73	779	5503
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	0	0	0	0	0	0	0	0	0
15.	MEGHALAYA	0	98	0	4	102	0	1	0	0	1
16.	MIZORAM	0	0	0	0	0	0	0	0	0	0
17.	NAGALAND	20	0	0	1	21	0	0	0	0	0
18.	ORISSA	3488	1529	589	1334	6940	858	816	157	574	2405
19.	PUNJAB	7723	607470	1404	548	617145	76	20129	41	0	20246
20.	RAJASTHAN	38014	303	2704	12	41033	4912	11	24	1	4948
21.	SIKKIM	0	0	0	0	0	0	0	0	0	0
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	0	34	30	90	154	1	2	14	105	122
24.	UTTAR PRADESH	10876	388779	4164	488	404307	3439	156356	473	198	160466
25.	WEST BENGAL	1690	38249	638	3094	43671	390	27569	167	1062	29188
26.	ANDAMAN & NICOBARS	0	0	0	4	4	0	0	0	26	26
27.	DADRA & NAGAR HAVELI	5	0	0	0	5	0	0	0	0	0
28.	DELHI	0	1437	15	0	1452	0	201	1	0	202
29.	PONDICHERRY	0	0	0	0	0	0	0	0	0	0
Total:		150069	1218645	16661	11705	1397080	33679	321068	2250	4466	361463

Table XV(contd.): - No. of Minor Irrigation Schemes under-utilised due to various reasons

S.NO.	STATE	LESS WATER DISCHARGE					Total
		Dugwell	Shallow Tubewell	Deep Tubewell	Surface Lift	Surface Flow	
1	2	13	14	15	16	17	18
1.	ANDHRA PRADESH	440016	68204	8020	2803	14112	533155
2.	ARUNACHAL PRADESH	0	0	0	0	67	67
3.	ASSAM	3	6696	10	1264	56	8029
4.	BIHAR	156236	51946	156	3209	18775	230322
5.	GOA	342	13	7	40	219	621
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	856	6178	35	0	84	7153
8.	HIMACHAL PRADESH	71	137	32	23	109	372
9.	JAMMU & KASHMIR	0	0	0	0	0	0
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	19253	180	16	1547	1261	22257
12.	MADHYA PRADESH	308131	24904	2490	34383	1267	371175
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	0	0	0	0	0
15.	MEGHALAYA	2	1	2	1	4104	4110
16.	MIZORAM	0	0	0	0	0	0
17.	NAGALAND	1	0	0	0	8	9
18.	ORISSA	34669	1232	241	1263	2260	39665
19.	PUNJAB	238	4337	11	0	294	4880
20.	RAJASTHAN	65254	3925	2308	9	255	71751
21.	SIKKIM	0	0	0	0	0	0
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	368	2	11	134	58	573
24.	UTTAR PRADESH	66186	64512	324	553	2194	133769
25.	WEST BENGAL	15311	45066	387	7381	11014	79159
26.	ANDAMAN & NICOBARS	0	0	0	261	0	261
27.	DADRA & NAGAR HAVELI	85	0	0	0	0	85
28.	DELHI	0	118	2	0	0	120
29.	PONDICHERRY	0	60	0	0	5	65
Total:		1107022	277511	14052	52871	56142	1507598

MINOR IRRIGATION CENSUS (1993-94)

Table XV(Contd.):— No. of Minor Irrigation Schemes under-utilised due to various reasons

S.NO.	STATE	OTHERS					
		Dugwell	Shallow Tubewell	Deep Tubewell	Surface Lift	Surface Flow	Total
		19	20	21	22	23	24
1.	ANDHRA PRADESH	57018	19960	1025	0	4967	82970
2.	ARUNACHAL PRADESH	0	0	0	0	727	727
3.	ASSAM	17	10945	277	4866	1929	18034
4.	BIHAR	161985	360768	2261	1431	24347	550792
5.	GOA	3388	13	5	423	2826	6655
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	19176	389579	4479	0	382	413616
8.	HIMACHAL PRADESH	492	198	36	93	2688	3507
9.	JAMMU & KASHMIR	0	11	3	0	31	45
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	102592	1963	163	4419	6783	115920
12.	MADHYA PRADESH	437025	46017	10580	23363	22237	539222
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	36	0	20	240	296
15.	MEGHALAYA	0	10	4	1	6618	6633
16.	MIZORAM	0	0	0	0	89	89
17.	NAGALAND	211	6	2	18	7049	7286
18.	ORISSA	183739	10111	866	8451	11603	214770
19.	PUNJAB	3474	306567	777	7	75	310900
20.	RAJASTHAN	19245	39	372	0	85	19741
21.	SIKKIM	0	0	0	0	350	350
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	69	0	43	134	45	291
24.	UTTAR PRADESH	40870	1139792	5315	578	10290	1196845
25.	WEST BENGAL	32471	378278	2317	30990	39014	483070
26.	ANDAMAN & NICOBARS	0	0	0	552	0	552
27.	DADRA & NAGAR HAVELI	77	0	0	0	0	77
28.	DELHI	0	532	63	0	33	628
29.	PONDICHERRY	0	128	0	0	3431	3559
Total:		1061849	2664953	28588	75346	145839	3976575

MINOR IRRIGATION CENSUS (1993-94)

Table XV(Contd.): - No. of Minor Irrigation Schemes under-utilised due to various reasons

S.NO.	STATE	TOTAL					Total
		Dugwell	Shallow Tubewell	Deep Tubewell	Surface Lift	Surface Flow	
1	2	25	26	27	28	29	30
1.	ANDHRA PRADESH	547232	128927	13243	4174	19079	712655
2.	ARUNACHAL PRADESH	0	0	0	0	794	794
3.	ASSAM	28	20158	387	7318	1985	29876
4.	BIHAR	351790	567299	4365	5548	43122	972124
5.	GOA	3888	26	12	562	3045	7533
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	26252	492159	6377	27	466	525281
8.	HIMACHAL PRADESH	615	382	76	144	2797	4014
9.	JAMMU & KASHMIR	0	11	3	0	31	45
10.	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11.	KERALA	126536	2344	193	6417	8044	143534
12.	MADHYA PRADESH	762516	73135	13429	62304	23504	934888
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	36	0	20	240	296
15.	MEGHALAYA	2	110	6	6	10722	10846
16.	MIZORAM	0	0	0	0	89	89
17.	NAGALAND	232	6	2	19	7057	7316
18.	ORISSA	222754	13688	1853	11622	13863	263780
19.	PUNJAB	11511	938503	2233	555	369	953171
20.	RAJASTHAN	127425	4278	5408	22	340	137473
21.	SIKKIM	0	0	0	0	350	350
22.	TAMIL NADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23.	TRIPURA	438	38	98	463	103	1140
24.	UTTAR PRADESH	121371	1749439	10276	1817	12484	1895387
25.	WEST BENGAL	49862	489162	3509	42527	50028	635088
26.	ANDAMAN & NICOBARS	0	0	0	843	0	843
27.	DADRA & NAGAR HAVELI	167	0	0	0	0	167
28.	DELHI	0	2288	81	0	33	2402
29.	PONDICHERRY	0	188	0	0	3436	3624
Total:		2352619	4482177	61551	144388	201981	7242716

MINOR IRRIGATION CENSUS (1993-94)

Table XVI: Statewise details for the number of Schemes

Sl. No.	State Name	No.of Distt.	No. of Blocks	No. of Villages	Dugwell	Shallow	Deep	S.Flow	S.Lift	Total
1.	ANDHRA PRADESH	23	1110	28566	1216412	317197	31216	79953	19426	1664204
2.	ARUNACHAL PRADESH	13	60	3563	0	0	0	3588	0	3588
3.	ASSAM	23	141	25525	38	27072	592	2347	9110	39159
4.	BIHAR	55	726	78613	391198	589519	6440	67248	11066	1065471
5.	GOA	2	16	410	3975	28	19	3176	752	7950
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	17	98	7073	26440	494294	6414	510	182	527840
8.	HIMACHAL PRADESH	12	103	19941	1722	1624	230	14345	557	18478
9.	JAMMU & KASHMIR	14	59	0	1425	1313	97	9144	351	12330
10.	KARNATAKA	20	175	29259	321859	79596	150582	39086	32348	623471
11.	KERALA	14	209	1067	126695	2364	198	10381	11264	150902
12.	MADHYA PRADESH	45	459	76810	1126439	121504	24451	56124	188875	1517393
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	8	26	264	0	36	0	240	20	296
15.	MEGHALAYA	7	32	5729	2	110	7	14264	15	14398
16.	MIZORAM	3	21	683	490	0	0	4775	12	5277
17.	NAGALAND	7	28	1051	530	6	3	14059	19	14617
18.	ORISSA	30	314	50000	323097	18095	2911	24103	20604	388810
19.	PUNJAB	14	126	12926	11671	944209	2277	394	764	959315
20.	RAJASTHAN	31	213	40248	1043077	63099	12550	3102	289	1122117
21.	SIKKIM	4	138	419	0	0	0	854	0	854
22.	TAMIL NADU	29	389	16634	1309788	76321	32966	84723	11577	1515375
23.	TRIPURA	4	27	955	805	136	131	600	829	2501
24.	UTTAR PRADESH	68	901	122858	136324	1982566	11625	23884	3466	2157865
25.	WEST BENGAL	17	346	41205	55983	504638	4039	66454	83645	714759
26.	ANDAMAN & NICOBARS	2	7	203	0	0	0	0	1210	1210
27.	DADRA & NAGAR HAVELI	1	11	73	413	0	0	11	54	478
28.	DELHI	7	6	187	0	9020	691	1383	0	11094
29.	PONDICHERY	4	14	123	222	3895	418	17645	406	22586
Total:		474	5755	564385	6098605	5236642	287857	542393	396841	12562338

MINOR IRRIGATION CENSUS (1993-94)

Table XVI(a): State wise number of surface flow schemes

S.No.	State/UT	Storage	Permanent Diversion	Temporary Diversion	Water Conversion	Total
1	Andhra Pradesh	70293	4177	2676	2807	79953
2	Arunachal Pradesh	62	440	3054	32	3588
3	Assam	183	195	1953	16	2347
4	Bihar	50813	8112	1829	6494	67248
5	Goa	1396	551	1180	49	3176
6	Gujarat	N.A.	N.A.	N.A.	N.A.	N.A.
7	Haryana	458	3	6	43	510
8	Himachal Pradesh	799	5865	7540	141	14345
9	Jammu & Kashmir	116	8493	535	0	9144
10	Karnataka	N.A.	N.A.	N.A.	N.A.	N.A.
11	Kerala	6534	2442	1166	239	10381
12	Madhya Pradesh	34382	6534	11427	3781	56124
13	Maharashtra	N.A.	N.A.	N.A.	N.A.	N.A.
14	Manipur	6	198	36	0	240
15	Meghalaya	803	2526	10440	495	14264
16	Mizoram	55	584	4136	0	4775
17	Nagaland	15	1792	12250	2	14059
18	Orissa	17028	4264	1989	822	24103
19	Punjab	213	150	26	5	394
20	Rajasthan	2508	275	244	75	3102
21	Sikkim	34	390	430	0	854
22	Tamilnadu	N.A.	N.A.	N.A.	N.A.	N.A.
23	Tripura	343	27	196	34	600
24	Uttar Pradesh	10835	4195	8027	827	23884
25	West Bengal	55401	4721	3984	2348	66454
26	A & N Islands	0	0	0	0	0
27	D & N Haveli	4	4	3	0	11
28	Delhi	13	1341	29	0	1383
29	Pondicherry	1191	14342	2111	1	17645
	Total	253485	71621	75267	18211	418584

MINOR IRRIGATION CENSUS (1993-94)

Table XVI(b): State wise number of surface lift schemes

S.No.	State/UT	On River	On Stream	On Drain	On Tanks/Ponds	Total
1	Andhra Pradesh	7846	9071	1657	852	19426
2	Arunachal Pradesh	0	0	0	0	0
3	Assam	1320	507	279	7004	9110
4	Bihar	3632	737	521	6176	11066
5	Goa	598	91	15	48	752
6	Gujarat	N.A.	N.A.	N.A.	N.A.	N.A.
7	Haryana	150	0	32	0	182
8	Himachal Pradesh	208	338	5	6	557
9	Jammu & Kashmir	170	65	82	34	351
10	Karnataka	N.A.	N.A.	N.A.	N.A.	N.A.
11	Kerala	3827	1676	520	5241	11264
12	Madhya Pradesh	120025	53863	9422	5565	188875
13	Maharashtra	N.A.	N.A.	N.A.	N.A.	N.A.
14	Manipur	20	0	0	0	20
15	Meghalaya	4	8	2	1	15
16	Mizoram	0	4	2	6	12
17	Nagaland	5	6	0	8	19
18	Orissa	9784	1257	4294	5269	20604
19	Punjab	540	100	124	0	764
20	Rajasthan	221	41	6	21	289
21	Sikkim	-	-	-	-	-
22	Tamilnadu	N.A.	N.A.	N.A.	N.A.	N.A.
23	Tripura	424	200	57	148	829
24	Uttar Pradesh	1495	1327	398	246	3466
25	West Bengal	12949	2516	17513	50667	83645
26	A&N Islands	111	270	73	756	1210
27	D&N Haveli	26	20	5	3	54
28	Delhi	0	0	0	0	0
29	Pondicherry	7	0	399	0	406
30	All India	163362	72097	35406	82051	352916

MINOR IRRIGATION CENSUS (1993-94)

Table XVII: Ownership Wise No. of Dug-wells and their Potential Created and Potential Utilised

Sl. No	State	No. of Wells in use			Potential Created			Potential Utilised		
		Public (Nos.)	Private (Nos.)	Total (Nos.)	Public (Ha)	Private (Ha)	Total (Ha)	Public (Ha)	Private (Ha)	Total (Ha)
1	ANDHRA PRADESH	3586	1014784	1018370	5778	1610305	1616083	4475	1240691	1245166
2	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0	0
3	ASSAM	0	28	28	0	83	83	0	47	47
4	BIHAR	16660	338022	354682	17697	415854	433551	13086	311567	324653
5	GOA	69	3819	3888	118	3719	3837	116	3322	3438
6	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7	HARYANA	395	25857	26252	1966	118933	120899	1966	118933	120899
8	HIMACHAL PRADESH	166	1537	1703	596	4601	5197	509	4018	4527
9	JAMMU & KASHMIR	21	1382	1403	18	1259	1277	15	1103	1118
10	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11	KERALA	603	125933	126536	3720	81928	85648	3323	75988	79311
12	MADHYA PRADESH	20065	1050215	1070280	54265	2685806	2740071	37240	1983487	2020727
13	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14	MANIPUR	0	0	0	0	0	0	0	0	0
15	MEGHALAYA	2	0	2	12	0	12	11	0	11
16	MIZORAM	1	402	403	3	721	724	3	612	615
17	NAGALAND	0	232	232	0	575	575	0	322	322
18	ORISSA	1092	265311	266403	1886	160252	162138	804	90981	91785
19	PUNJAB	35	11476	11511	1478	93199	94677	367	78933	79300
20	RAJASTHAN	9334	810698	820032	33612	3379986	3413598	30409	3056085	3086494
21	SIKKIM	0	0	0	0	0	0	0	0	0
22	TAMILNADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23	TRIPURA	105	695	800	362	1257	1619	212	909	1121
24	UTTAR PRADESH	579	121246	121825	5215	440941	446156	3958	340594	344552
25	WEST BENGAL	5860	44002	49862	4211	29096	33307	2961	19499	22460
26	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0	0
27	DADRA & NAGAR HAVELI	14	395	409	32	817	849	31	711	742
28	DELHI	0	0	0	0	0	0	0	0	0
29	PONDICHERY	2	189	191	10	384	394	10	383	393
TOTAL		58589	3816223	3874812	130999	9029696	9160695	99496	7328185	7427681

MINOR IRRIGATION CENSUS (1993-94)

Table XVIII : Ownership Wise No. of Deep Tube-wells and their Potential Created and Potential Utilised

Sl. No	State	No. of Wells in use			Potential Created			Potential Utilised		
		Public (Nos.)	Private (Nos.)	Total (Nos.)	Public (Ha)	Private (Ha)	Total (Ha)	Public (Ha)	Private (Ha)	Total (Ha)
1	ANDHAR PRADESH	683	29156	29839	10724	132693	143417	8703	113266	121969
2	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0	0
3	ASSAM	387	0	387	17940	0	17940	8762	0	8762
4	BIHAR	2041	2357	4398	120987	20964	141951	63673	13304	76977
5	GOA	9	3	12	19	30	49	19	26	45
6	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7	HARYANA	295	6082	6377	4627	33590	38217	4588	33124	37712
8	HIMACHAL PRADESH	203	26	229	7967	592	8559	7188	576	7764
9	JAMMU & KASHMIR	19	78	97	2555	1437	3992	2405	1582	3987
10	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11	KERALA	15	178	193	75	734	809	75	633	708
12	MADHYA PRADESH	1019	21995	23014	17499	107251	124750	11525	71276	82801
13	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14	MANIPUR	0	0	0	0	0	0	0	0	0
15	MEGHALAYA	6	0	6	359	0	359	247	0	247
16	MIZORAM	0	0	0	0	0	0	0	0	0
17	NAGALAND	0	2	2	0	10	10	0	6	6
18	ORISSA	1783	83	1866	53201	810	54011	13717	413	14130
19	PUNJAB	160	2073	2233	16768	29255	46023	12942	23455	36397
20	RAJASTHAN	112	11614	11726	1027	150592	151619	948	137443	138391
21	SIKKIM	0	0	0	0	0	0	0	0	0
22	TAMILNADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23	TRIPURA	119	0	119	3776	0	3776	3144	0	3144
24	UTTAR PRADESH	8126	2926	11052	771952	205569	977521	599545	156787	756332
25	WEST BENGAL	3433	76	3509	216385	9062	225447	123608	6810	130418
26	ANDAMAN & NICOBAR	0	0	0	0	0	0	0	0	0
27	DADRA NAGA HAVELI	0	0	0	0	0	0	0	0	0
28	DELHI	1	685	686	26	7024	7050	26	6642	6668
29	PONDICHERY	1	411	412	32	1389	1421	32	1381	1413
TOTAL		18412	77745	96157	1245919	701002	1946921	861147	566724	1427871

MINOR IRRIGATION CENSUS (1993-94)

Table XIX: Ownership Wise No. of Shallow Tube-wells and their Potential Created and Potential Utilised

Sl. No	State	No. of Wells in use			Potential Created			Potential Utilised		
		Public (Nos.)	Private (Nos.)	Total (Nos.)	Public (Ha)	Private (Ha)	Total (Ha)	Public (Ha)	Private (Ha)	Total (Ha)
1	ANDHARA PRADESH	1357	303001	304358	4768	718518	723286	3886	614092	617978
2	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0	0
3	ASSAM	1404	18754	20158	6391	61693	68084	3117	39123	42240
4	BIHAR	4711	570541	575252	16809	2493078	2509887	12731	1866144	1878875
5	GOA	1	25	26	1	51	52	1	35	36
6	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7	HARYANA	4167	487992	492159	28428	2081605	2110033	26872	1967435	1994307
8	HIMACHAL PRADESH	272	1332	1604	3265	3644	6909	2818	3528	6346
9	JAMMU & KASHMIR	7	1295	1302	26	3100	3126	21	3029	3050
10	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11	KERALA	53	2291	2344	1158	1793	2951	1148	1700	2848
12	MADHYA PRADESH	1020	118223	119243	10665	627488	638153	8319	489227	497546
13	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14	MANIPUR	36	0	36	308	0	308	195	0	195
15	MEGHALAYA	1	109	110	5	401	406	5	74	79
16	MIZORAM	0	0	0	0	0	0	0	0	0
17	NAGALAND	0	6	6	0	26	26	0	15	15
18	ORISSA	1015	14269	15284	46152	61245	107397	22257	31946	54203
19	PUNJAB	866	937637	938503	17685	6539167	6556852	7715	6014601	6022316
20	RAJASTHAN	122	58473	58595	585	278139	278724	582	274502	275084
21	SIKKIM	0	0	0	0	0	0	0	0	0
22	TAMILNADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23	TRIPURA	5	108	113	32	381	413	32	367	399
24	UTTAR PRADESH	1307	1970833	1972140	11243	10466441	10477684	9549	8642559	8652108
25	WEST BENGAL	12219	476943	489162	60489	1421862	1482351	44558	1135108	1179666
26	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0	0
27	DADRA NAGAR HAVELI	0	0	0	0	0	0	0	0	0
28	DELHI	0	8984	8984	0	43993	43993	0	42814	42814
29	PONDICHERY	52	3591	3643	591	7555	8146	552	7370	7922
TOTAL		28615	4974407	5003022	208601	24810180	25018781	144358	21133669	21278027

MINOR IRRIGATION CENSUS (1993-94)

Table XX: Ownership Wise No. of Surface Flow Schemes and their Potential Created and Potential Utilised

Sl. No	State	No. of Wells in use			Potential Created			Potential Utilised		
		Public (Nos.)	Private (Nos.)	Total (Nos.)	Public (Ha)	Private (Ha)	Total (Ha)	Public (Ha)	Private (Ha)	Total (Ha)
1	ANDHAR PRADESH	44315	6451	50766	1115787	99173	1214960	853823	75871	929694
2	ARUNACHAL PRADESH	1304	1690	2994	26019	13514	39533	18489	9323	27812
3	ASSAM	889	1312	2201	107539	32597	140136	64846	23986	88832
4	BIHAR	31036	28956	59992	464486	219928	684414	340631	151275	491906
5	GOA	70	3040	3110	932	8880	9812	931	8552	9483
6	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7	HARYANA	5	502	507	97	3418	3515	76	3389	3465
8	HIMACHAL PRADESH	5305	8616	13921	64127	87291	151418	58994	78997	137991
9	JAMMU & KASHMIR	3645	5468	9113	231101	81681	312782	216452	78888	295340
10	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11	KERALA	5249	4845	10094	146029	84247	230276	124877	74582	199459
12	MADHYA PRADESH	16492	37086	53578	474962	175065	650027	301989	126830	428819
13	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14	MANIPUR	240	0	240	26852	0	26852	16104	0	16104
15	MEGHALAYA	572	11791	12363	15666	41368	57034	11056	30678	41734
16	MIZORAM	0	4389	4389	0	5985	5985	0	5559	5559
17	NAGALAND	1	13118	13119	2	61312	61314	2	38086	38088
18	ORISSA	14616	7191	21807	602963	50829	653792	394497	36726	431223
19	PUNJAB	12	378	390	2802	3951	6753	1077	3129	4206
20	RAJASTHAN	1634	536	2170	119774	6513	126287	99937	5647	105584
21	SIKKAM	542	224	766	12492	3237	15729	9547	2956	12503
22	TAMILNADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23	TRIPURA	286	301	587	6067	2290	8357	5392	1951	7343
24	UTTAR PRADESH	9244	8324	17568	178651	51453	230104	155241	43947	199188
25	WEST BENGAL	8624	53268	61892	155606	278377	433983	115519	201507	317026
26	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0	0
27	DADRA NAGAR HAVELI	10	1	11	111	4	115	95	4	99
28	DELHI	63	1309	1372	225	6274	6499	225	6206	6431
29	PONDICHERY	92	17549	17641	3437	10049	13486	1820	9340	11160
TOTAL		144246	216345	360591	3755727	1327436	5083163	2791620	1017429	3809049

MINOR IRRIGATION CENSUS (1993-94)

Table XXI: Ownership Wise No. of Surface Lift Schemes and their Potential Created and Potential Utilised

Sl. No	State	No. of Wells in use			Potential Created			Potential Utilised		
		Public (Nos.)	Private (Nos.)	Total (Nos.)	Public (Ha)	Private (Ha)	Total (Ha)	Public (Ha)	Private (Ha)	Total (Ha)
1	ANDHARA PRADESH	1005	17807	18812	62908	115244	178152	43700	93120	136820
2	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0	0
3	ASSAM	556	7008	7564	88639	21094	109733	36159	13513	49672
4	BIHAR	3900	5131	9031	55578	17979	73557	32655	11165	43820
5	GOA	67	679	746	1570	2589	4159	1338	2367	3705
6	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7	HARYANA	1	181	182	8	1416	1424	8	1412	1420
8	HIMACHAL PRADESH	382	154	536	14305	1676	15981	11554	1418	12972
9	JAMMU & KASHMIR	29	296	325	14145	20424	34569	10852	20827	31679
10	KARNATAKA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
11	KERALA	545	10708	11253	52175	47596	99771	47409	45203	92612
12	MADHYA PRADESH	11598	175330	186928	89331	735571	824902	49561	553260	602821
13	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14	MANIPUR	20	0	20	3450	0	3450	2049	0	2049
15	MEGHALAYA	5	3	8	1411	574	1985	657	484	1141
16	MIZORAM	3	9	12	100	60	160	100	60	160
17	NAGALAND	0	19	19	0	293	293	0	212	212
18	ORISSA	6377	11820	18197	177466	39236	216702	85642	26898	112540
19	PUNJAB	13	751	764	172	11905	12077	160	8613	8773
20	RAJASTHAN	77	203	280	5358	4766	10124	4419	4376	8795
21	SIKKIM	0	0	0	0	0	0	0	0	0
22	TAMILNADU	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
23	TRIPURA	391	409	800	23374	2115	25489	18495	1877	20372
24	UTTAR PRADESH	502	2686	3188	30901	13146	44047	25976	11949	37925
25	WEST BENGAL	4635	71666	76301	243707	211287	454994	127541	158965	286506
26	ANDAMAN & NICOBARS	4	938	942	6	1622	1628	4	1095	1099
27	DADRA NAGAR HAVELI	21	32	53	441	127	568	406	111	517
28	DELHI	0	0	0	0	0	0	0	0	0
29	PONDICHERY	0	405	405	0	333	333	0	330	330
TOTAL		30131	306235	336366	865045	1249053	2114098	498685	957259	1455944

VILLAGE SCHEDULE

MINOR IRRIGATION CENSUS (1993-94)

Village Schedule

Table XXII Agricultural land and its use

Sl. No.	Name of State/Uts.	Geograph- ical Area	Cultivable Area	Net Area Sown	Net Area Irrigated by (In ha.)			
		(ha.)	(ha.)	(ha.)	Maj/Med. Scheme	Ground Water	Others	Total (6+7+8)
1	2	3	4	5	6	7	8	9
1.	ANDHRA PRADESH	26263738	13217369	10020878	1566251	1677983	956627	4200861
2.	ARUNACHAL PRADESH	3604484	783422	107905	2110	1351	27634	31095
3.	ASSAM	5376878	3227910	2543030	37204	34845	103452	175501
4.	BIHAR	21195364	10332840	8485593	871388	2029444	891176	3792008
5.	GOA	309098	117660	40137	403	4147	6527	11077
6.	GUJARAT	0	0	0	0	0	0	0
7.	HARYANA	4181994	1278345	1225048	197338	345702	4536	547576
8.	HIMACHAL PRADESH	3782942	674760	561880	0	11733	83870	95603
9.	JAMMU & KASHMIR	0	0	0	0	0	0	0
10.	KARNATAKA	21032625	12264587	10548990	704162	735890	446383	1886435
11.	KERALA	0	0	0	0	0	0	0
12.	MADHYA PRADESH	36217857	20293099	19008656	1086905	2928446	1052853	5068204
13.	MAHARASHTRA	0	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0	0
15.	MEGHALAYA	1306691	516443	284441	7178	8999	21442	37619
16.	MIZORAM	855027	335529	73665	0	0	258	258
17.	NAGALAND	0	0	0	0	0	0	0
18.	ORISSA	11685301	6131500	5311288	616785	146628	458611	1222024
19.	PUNJAB	5157915	4220948	4092611	1268952	2622408	14374	3905734
20.	RAJASTHAN	33879051	21592457	15694610	1230623	2701780	584016	4516419
21.	SIKKIM	80101	40322	33335	102	85	7553	7740
22.	TAMIL NADU	12126264	5522548	4039537	875286	1138026	632224	2645536
23.	TRIPURA	876289	306121	33517	819	4803	27841	33463
24.	UTTAR PRADESH	28353789	19228488	17755797	2475165	5630106	1361846	9467117
25.	WEST BENGAL	8782641	5459889	4424993	429229	1020292	506041	1955562
26.	ANDAMAN & NICOBARS	57511	14118	9081	0	0	1093	1093
27.	DADRA & NAGAR HAVELI	48986	24906	22629	1437	737	577	2751
28.	DELHI	71718	40487	43709	734	18383	60	19177
29.	PONDICHERRY	27066	13862	11577	0	6949	3113	10062
Total :		225273330	125637610	104372907	11372071	21068737	7192107	39632915

MINOR IRRIGATION CENSUS (1993-94)

Village Schedule

Table XXIII Villages According to their Ground Water Level

(in Nos.)

Sl. No.	Name of State/Uts.	No. of Villages According to its Ground Water Level							
		Below 10 Mtr.	10-15 Mtr.	15-20 Mtr.	20-25 Mtr.	25-30 Mtr.	30-35 Mtr.	35-40 Mtr.	40-45 Mtr.
1	2	3	4	5	6	7	8	9	10
1.	ANDHRA PRADESH	10345	5227	1933	1188	1339	744	1094	507
2.	ARUNACHAL PRADESH	2454	167	143	95	90	62	43	46
3.	ASSAM	25523	2	0	0	0	0	0	0
4.	BIHAR	34416	21430	7684	4850	3314	1311	1565	445
5.	GOA	337	26	5	0	5	1	1	0
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	1223	2060	1506	647	527	183	237	46
8.	HIMACHAL PRADESH	14701	682	312	134	209	84	232	77
9.	JAMMU & KASHMIR	0	0	0	0	0	0	0	0
10.	KARNATAKA	9602	1552	1196	602	718	322	534	217
11.	KERALA	0	0	0	0	0	0	0	0
12.	MADHYA PRADESH	52974	18296	3336	667	476	147	151	61
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	0	0	0	0	0	0	0
15.	MEGHALAYA	4744	100	23	8	6	2	3	0
16.	MIZORAM	660	2	0	0	0	0	1	1
17.	NAGALAND	0	0	0	0	0	0	0	0
18.	ORISSA	39138	7634	1519	805	296	98	93	78
19.	PUNJAB	5112	7813	0	0	0	0	0	0
20.	RAJASTHAN	9697	9367	7031	3321	2793	1159	1303	764
21.	SIKKIM	182	0	0	0	0	0	0	0
22.	TAMIL NADU	5236	3146	1015	419	446	168	225	68
23.	TRIPURA	865	48	29	3	3	1	0	0
24.	UTTAR PRADESH	94154	17183	4797	1779	1335	558	462	335
25.	WEST BENGAL	26768	8496	1914	802	512	230	222	104
26.	ANDAMAN & NICOBARS	138	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	55	17	0	0	0	0	0	0
28.	DELHI	41	50	40	18	6	1	1	0
29.	PONDICHERRY	20	5	3	6	8	5	4	6
Total :		338385	103303	32486	15344	12083	5076	6171	2755

Table XXIII (continued) Villages According to their Ground Water Level

(in Nos.)

Sl. No.	Name of State/Uts.	No. of Villages According to its Ground Water Level						Total (3 to 16)
		45-50 Mtr.	50-55 Mtr.	55-60 Mtr.	60-65 Mtr.	65-70 Mtr.	Above 70 Mtr.	
1	2	11	12	13	14	15	16	17
1.	ANDHRA PRADESH	1007	350	857	343	667	2061	27662
2.	ARUNACHAL PRADESH	30	12	18	20	11	288	3479
3.	ASSAM	0	0	0	0	0	0	25525
4.	BIHAR	534	163	424	244	769	1089	78238
5.	GOA	0	0	0	0	0	0	375
6.	GUJARAT	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
7.	HARYANA	170	25	101	28	97	128	6978
8.	HIMACHAL PRADESH	417	94	282	47	148	2522	19941
9.	JAMMU & KASHMIR	0	0	0	0	0	0	0
10.	KARNATAKA	627	209	757	499	1116	4643	22594
11.	KERALA	0	0	0	0	0		
12.	MADHYA PRADESH	83	32	100	54	131	303	76811
13.	MAHARASHTRA	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
14.	MANIPUR	0	0	0	0	0	0	0
15.	MEGHALAYA	6	1	6	1	3	63	4966
16.	MIZORAM	3	4	10	1	0	0	682
17.	NAGALAND	0	0	0	0	0	0	0
18.	ORISSA	32	21	28	12	9	236	49999
19.	PUNJAB	0	0	0	0	0	0	12925
20.	RAJASTHAN	1417	266	571	221	419	1919	40248
21.	SIKKIM	0	0	0	0	0	3	185
22.	TAMIL NADU	189	18	109	39	74	495	11647
23.	TRIPURA	0	0	0	0	0	1	950
24.	UTTAR PRADESH	238	56	254	82	221	1404	122858
25.	WEST BENGAL	125	28	124	48	189	521	40083
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	138
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0	72
28.	DELHI	1	0	1	5	6	8	178
29.	PONDICHERY	5	0	1	1	1	5	70
Total :		4884	1279	3643	1645	3861	15689	546604

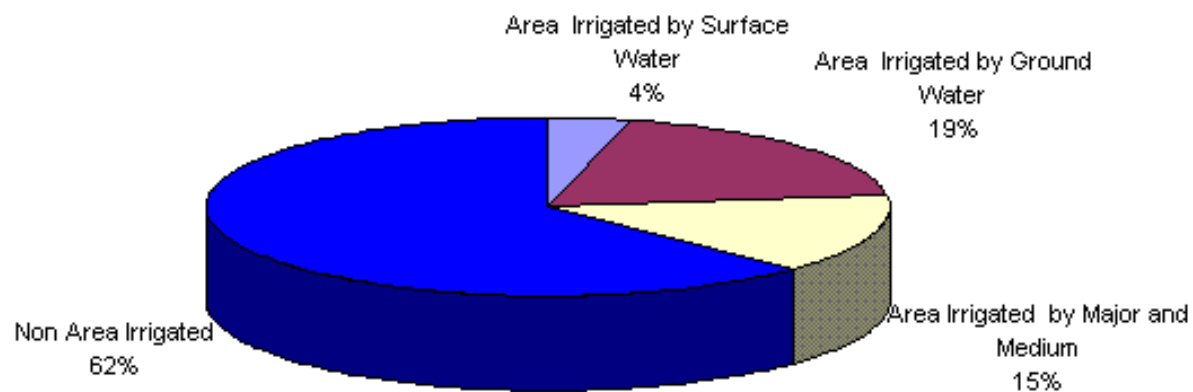
STATISTICAL CHARTS

Minor Irrigation Census (1993-94)

Gross Area Irrigated in 1993-94

(Area Irrigated in 000' hect)

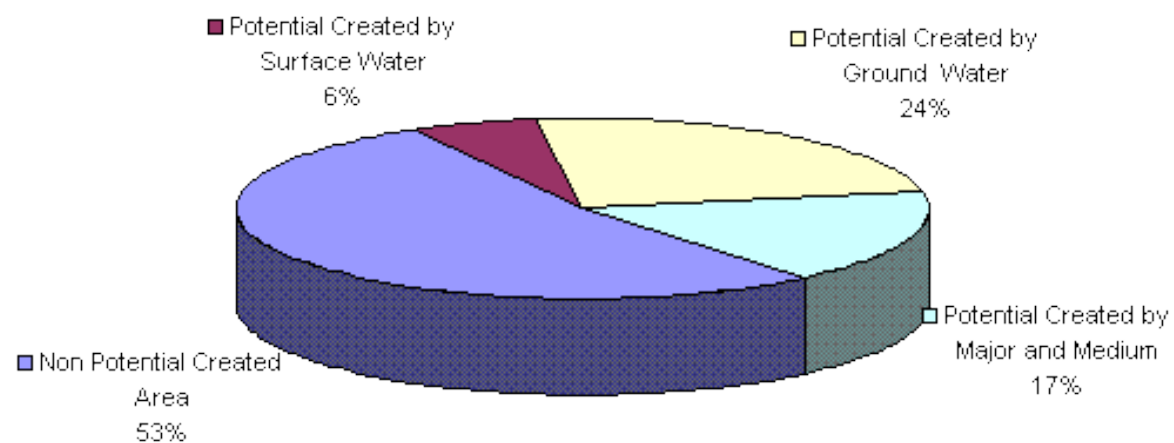
Gross Area Sown - 186595 hect.



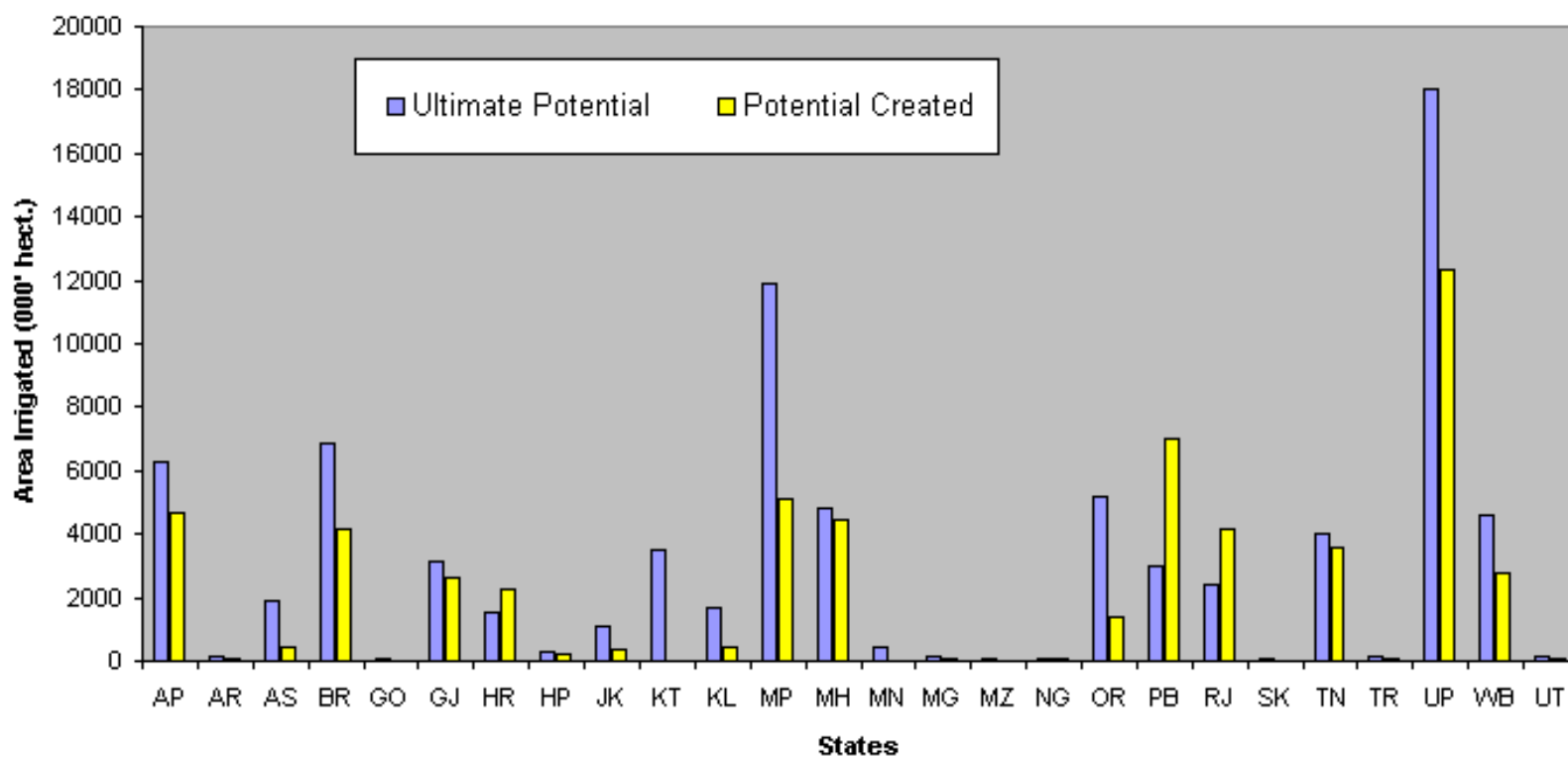
Minor Irrigation Census (1993-94)
Irrigation Potential Created upto 93-94

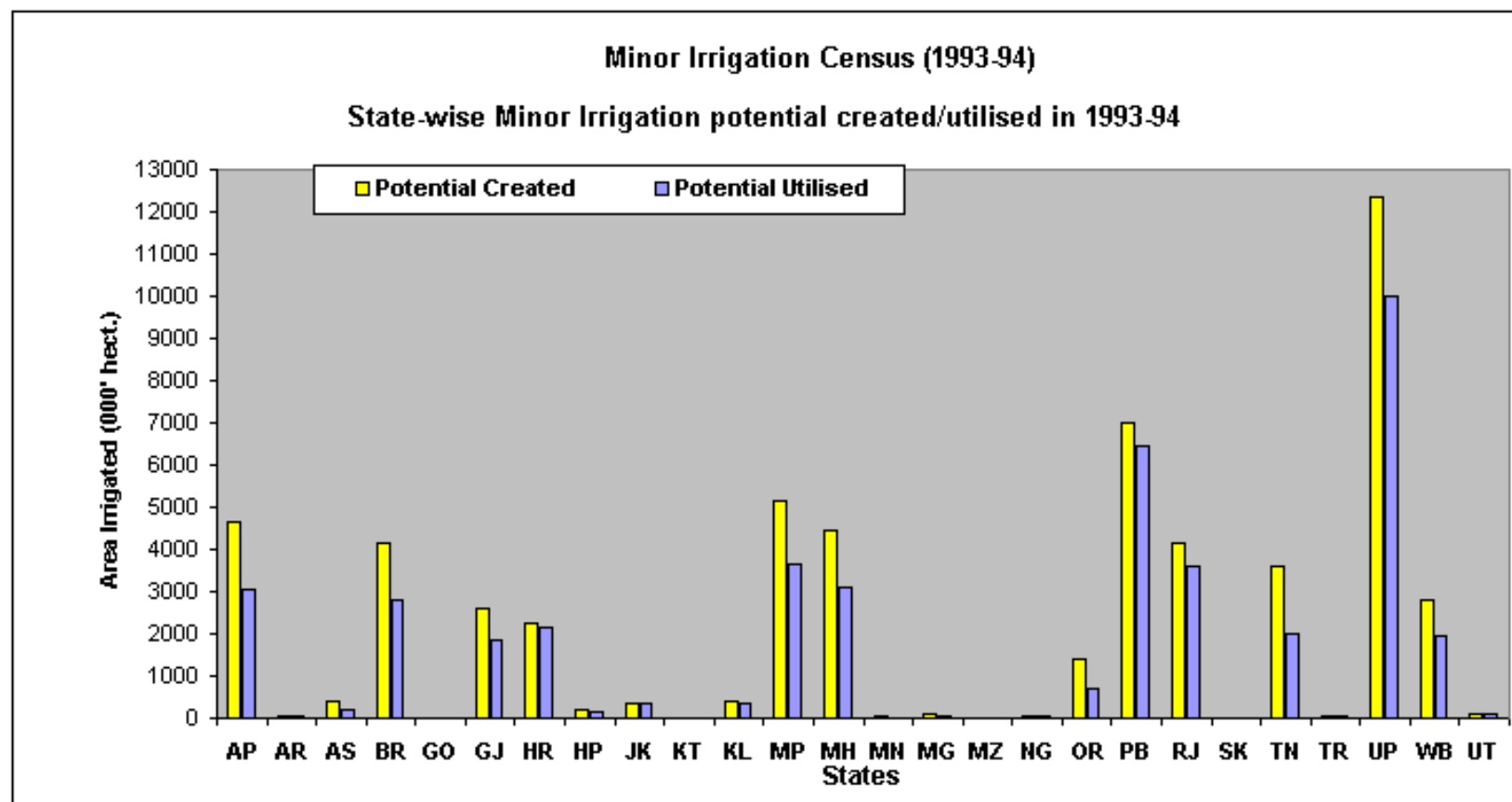
(Area Irrigated in 000' hect)

Gross Area Sown - 186595 hect

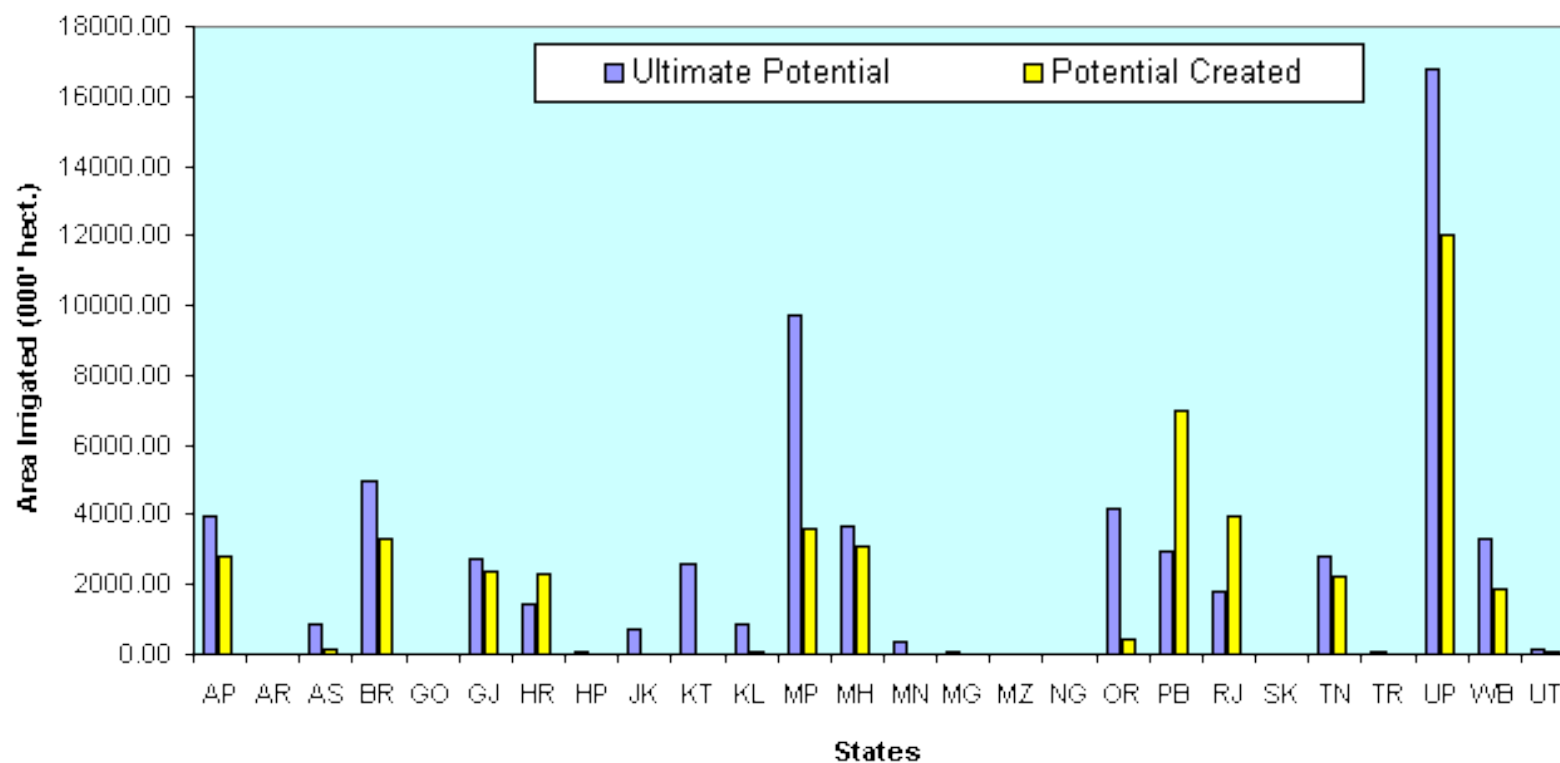


Minor Irrigation Census (1993-94)
State-wise Gross Area Irrigated by Minor Irrigation Sources against their ultimate in 1993-94

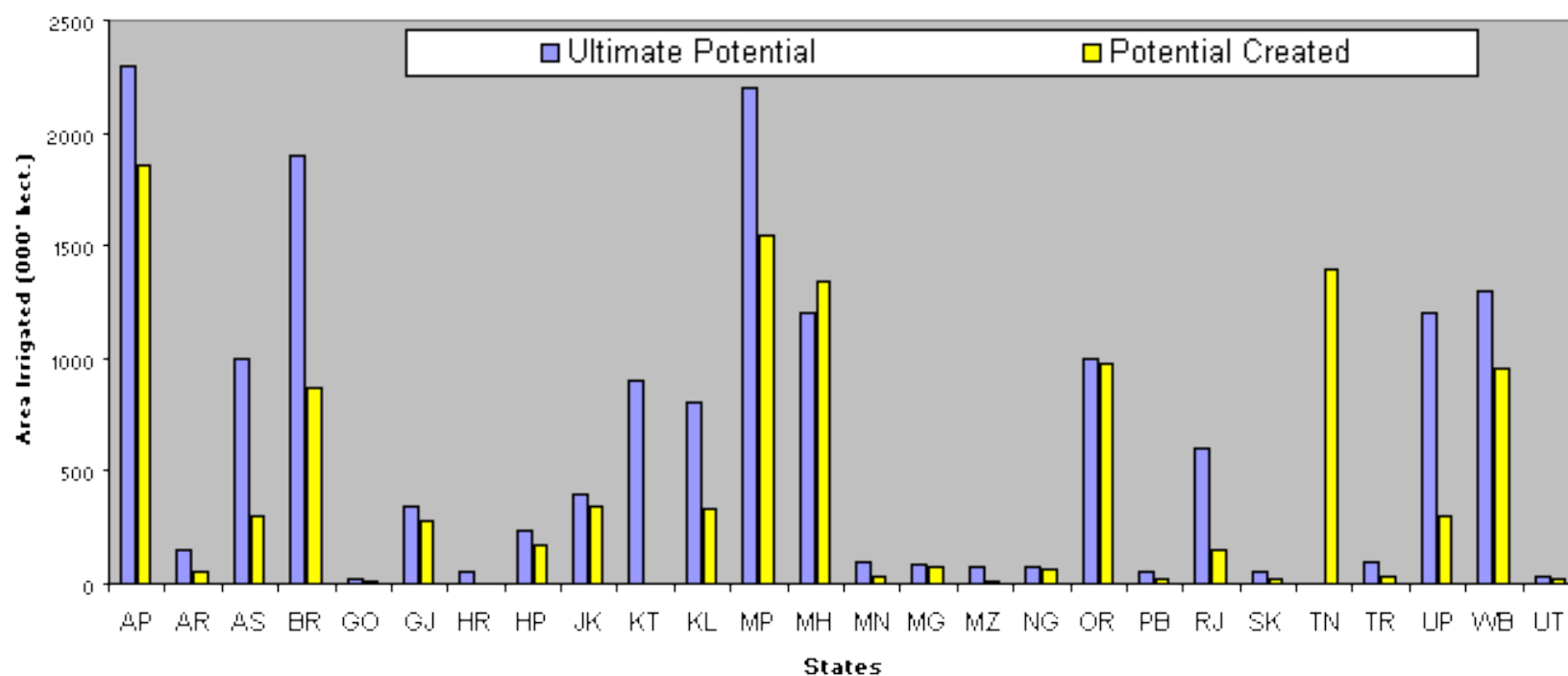




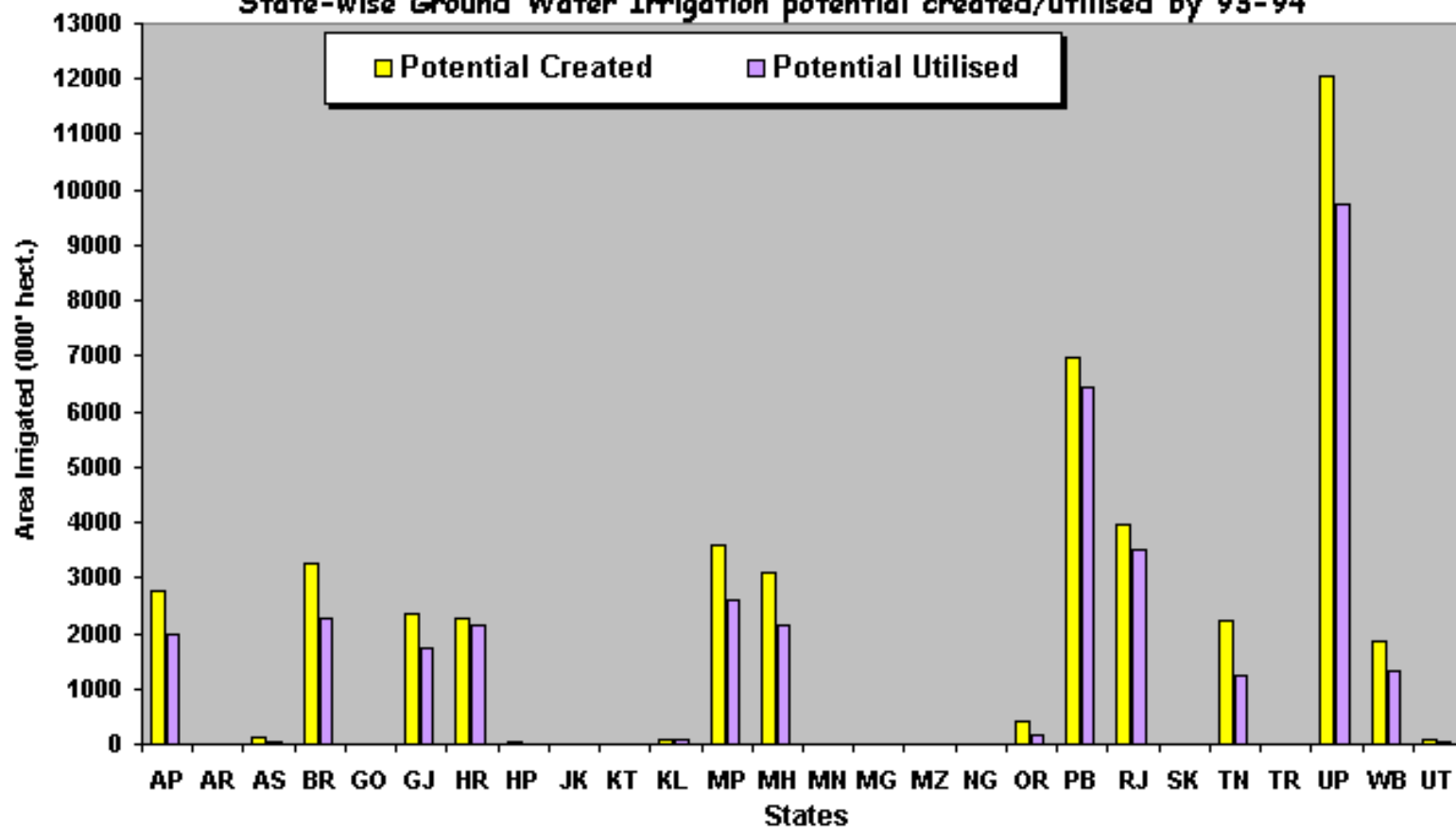
Minor Irrigation Census (1993-94)
State-wise Ground Water potential created against its ultimate by 1993-94



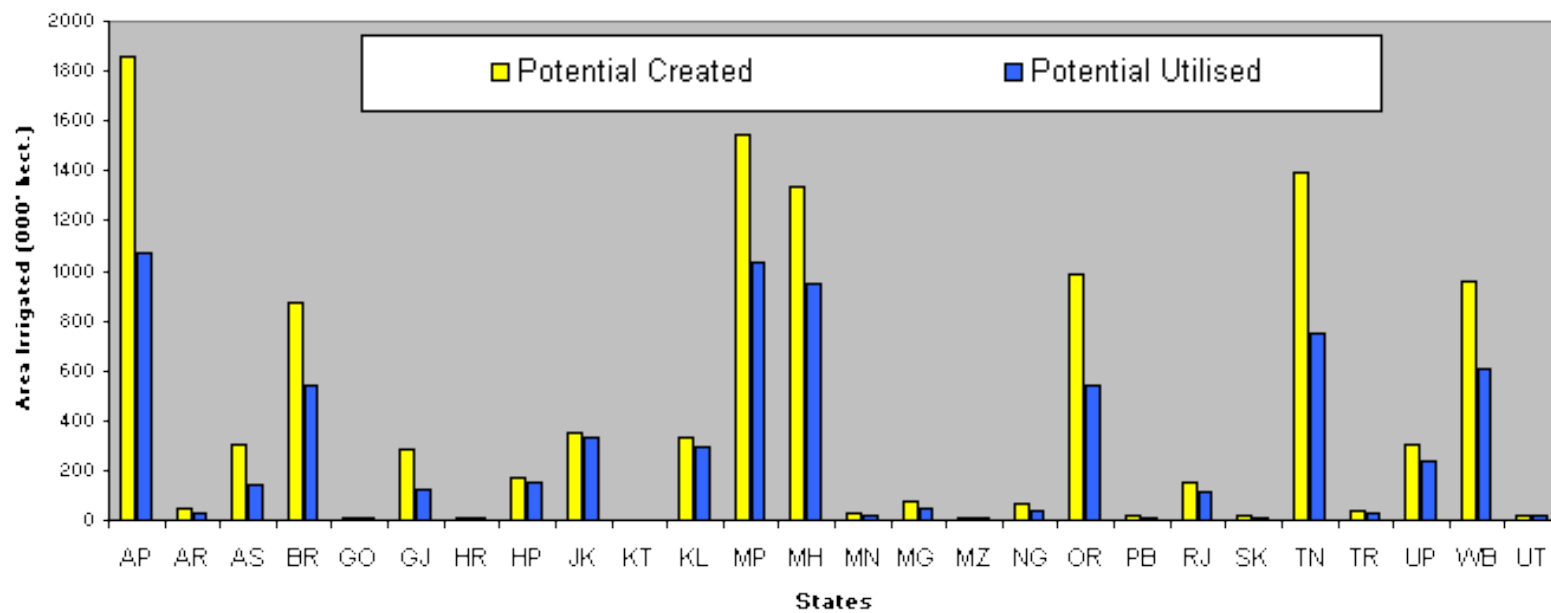
Minor Irrigation Census (1993-94)
State-wise Surface Water potential created against its ultimate by 93-94



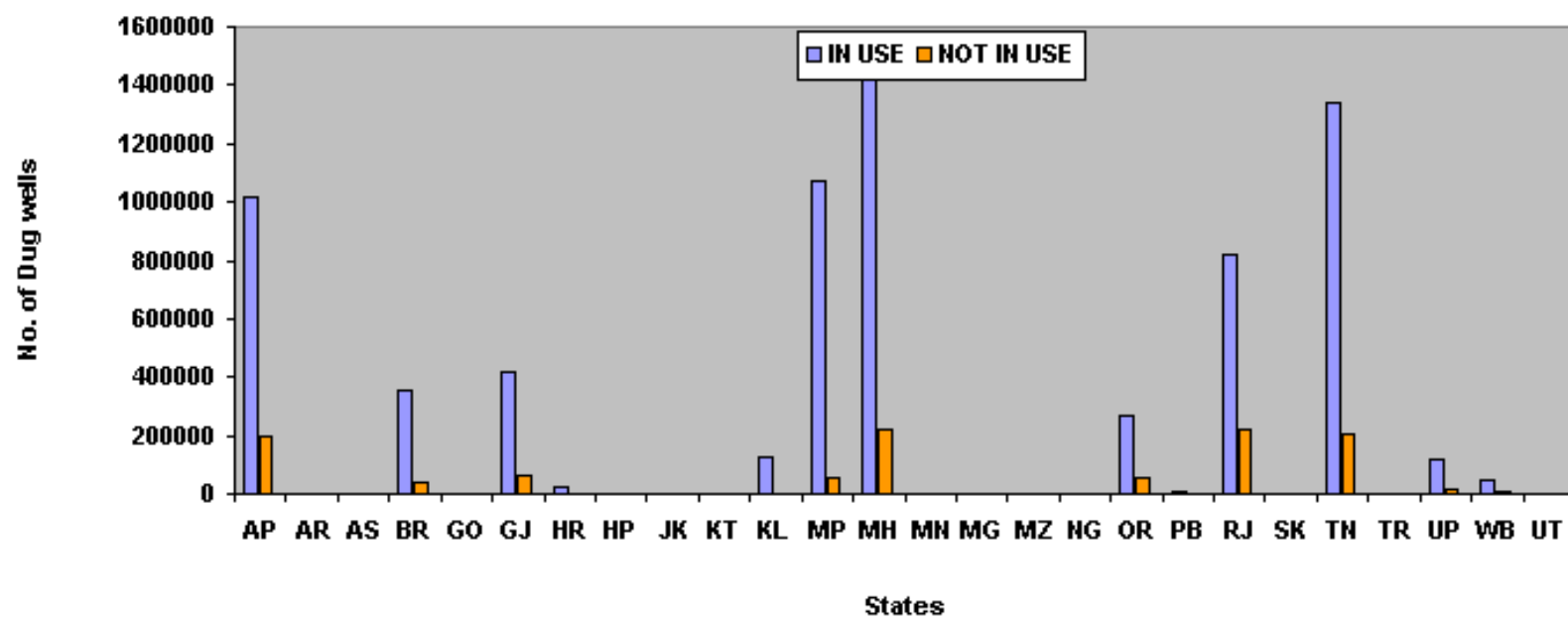
Minor Irrigation Census (1993-94)
State-wise Ground Water Irrigation potential created/ utilised by 93-94



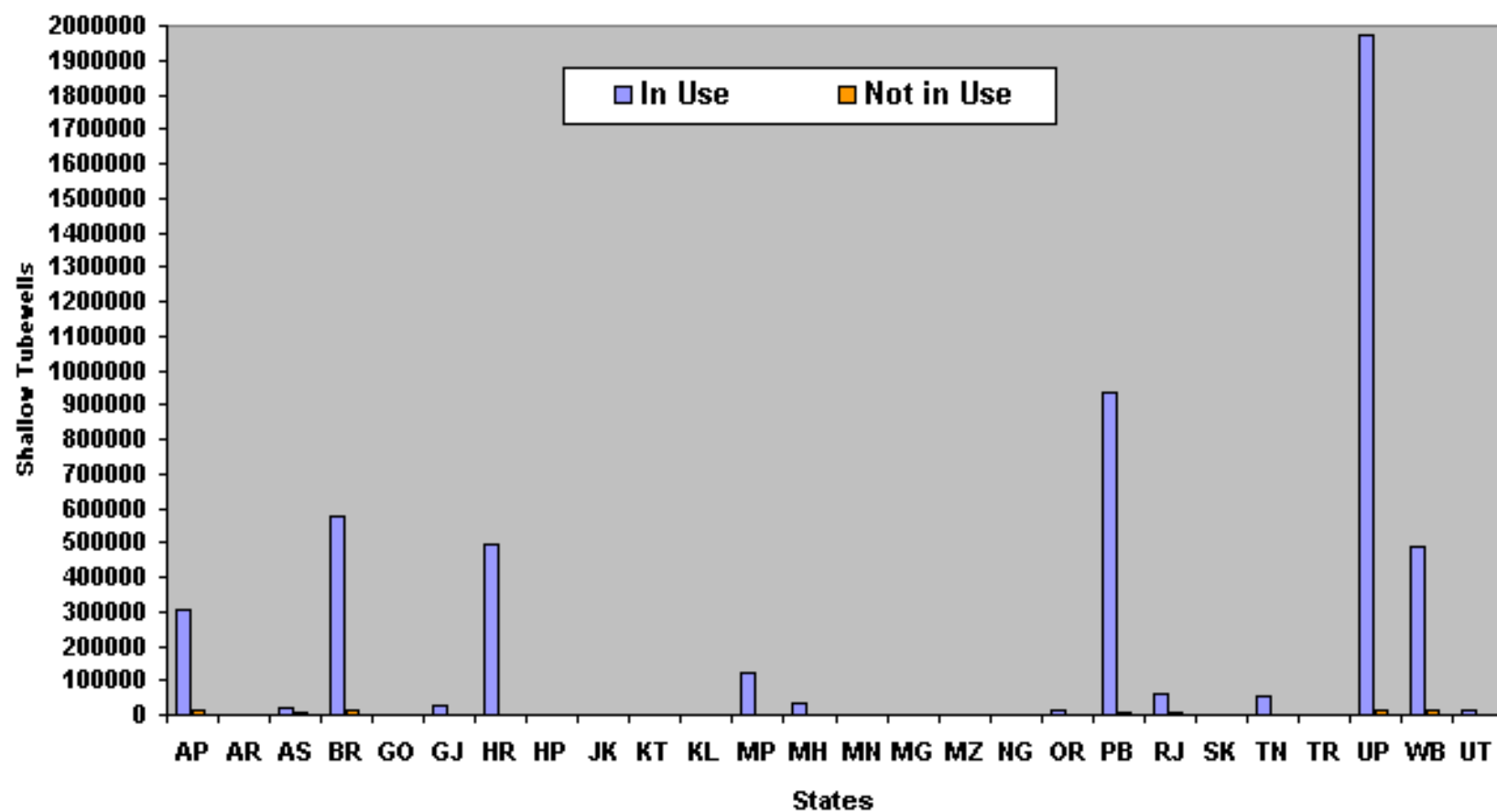
Minor Irrigation Census(1993-94)
State-wise Surface Water Irrigation Potential created/ utilised by 1993-94



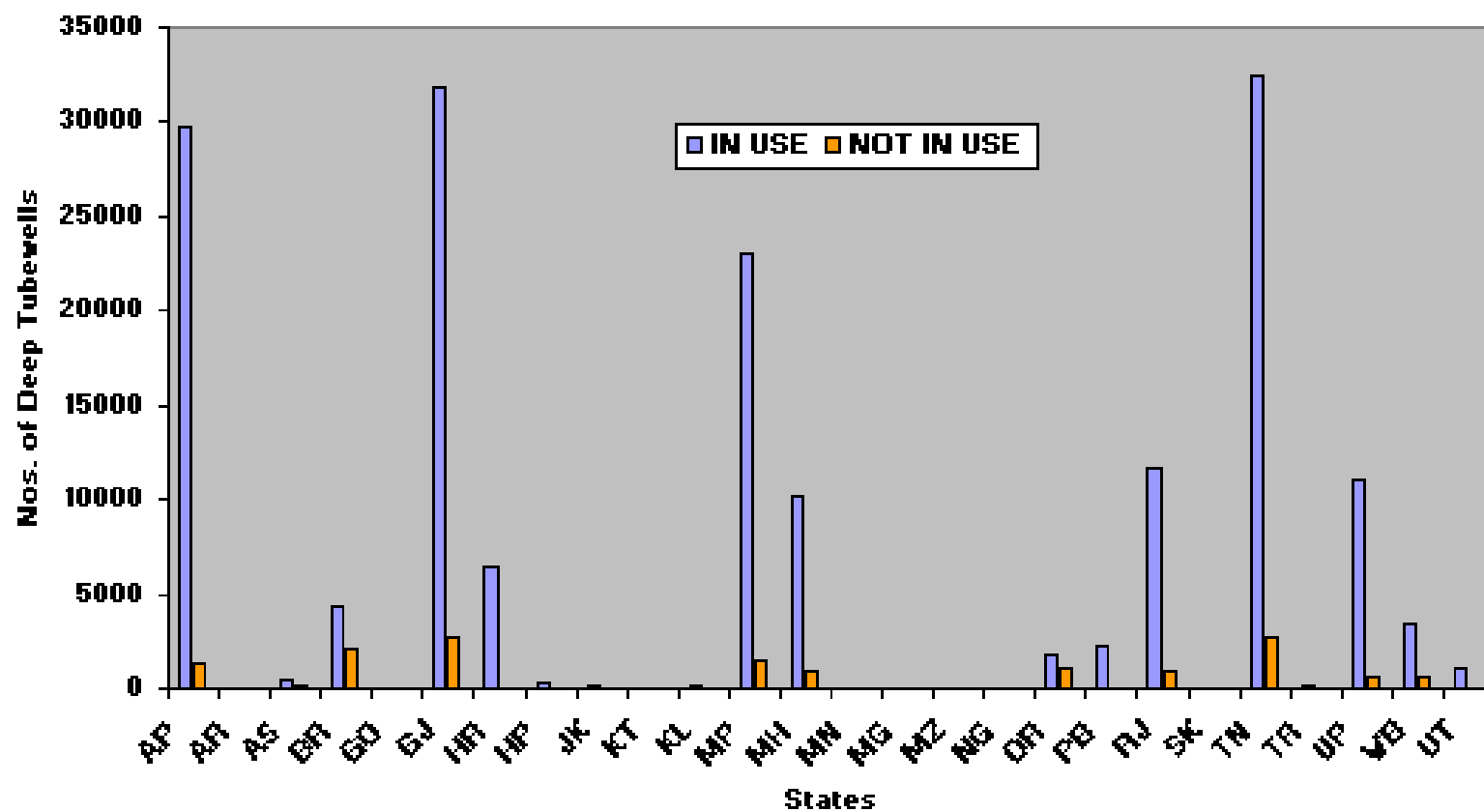
Minor Irrigation Census 1993-94
State-wise No. of Dug wells in Use/ Not in Use for M.I. works



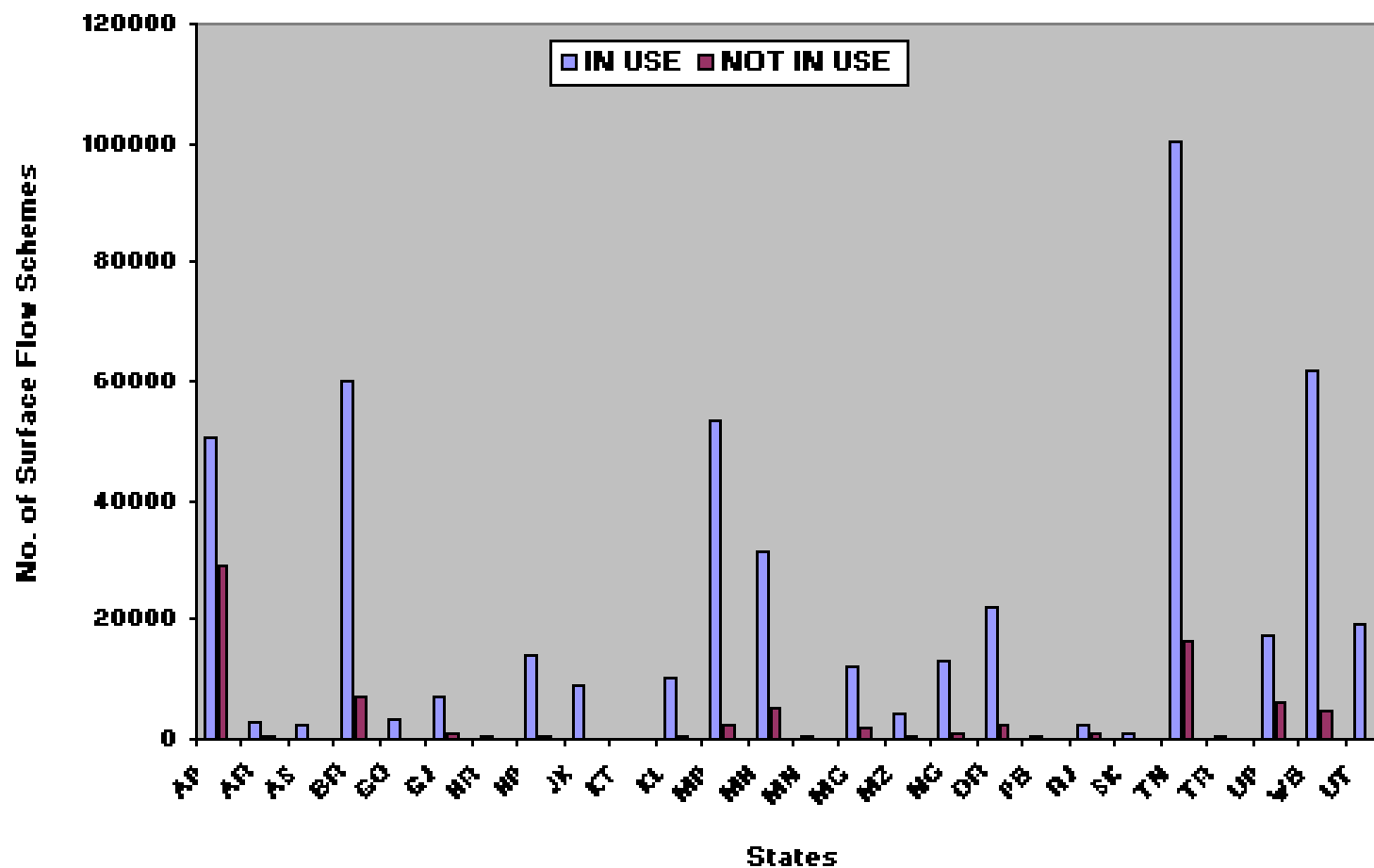
Minor Irrigation Census 1993-94
State-wise Nos. of Shallow Tubewells in Use/Not in Use for M.I. works



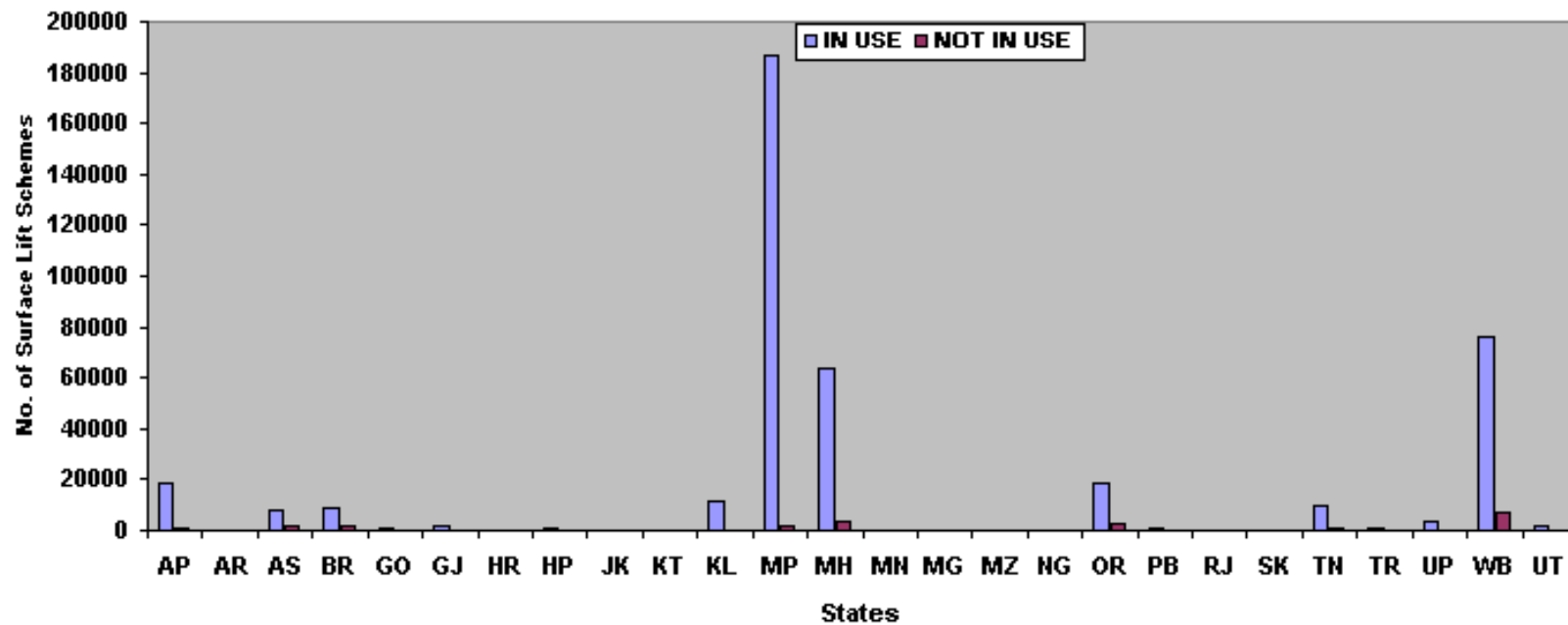
Minor Irrigation Census 1993-94
State-wise Nos. of Deep Tubewells in Use/ Not in Use for M.I. works



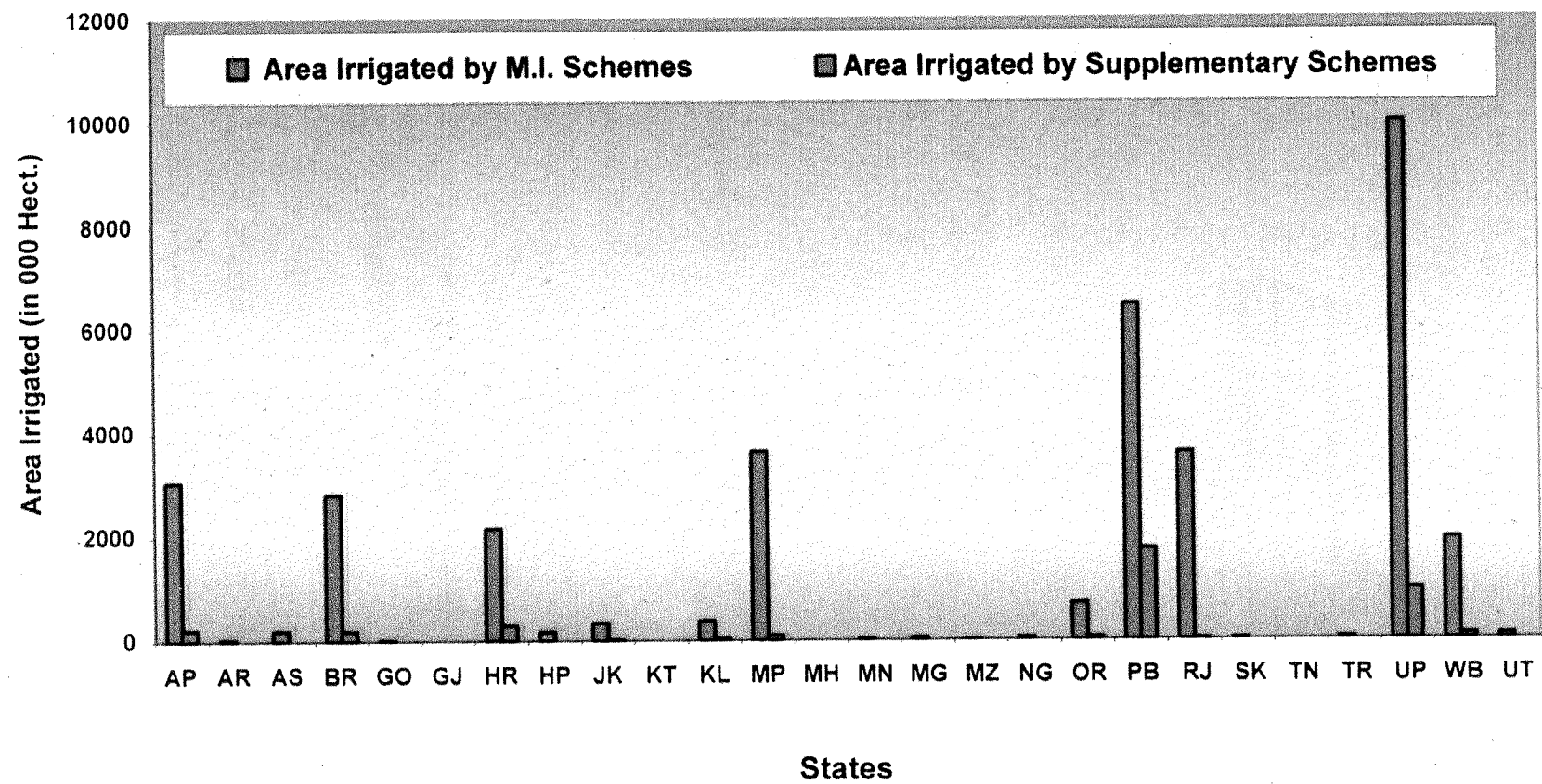
Minor Irrigation Census 1993-94
State-wise No. of Surface Flow Schemes in use/Not in Use for M.I. works



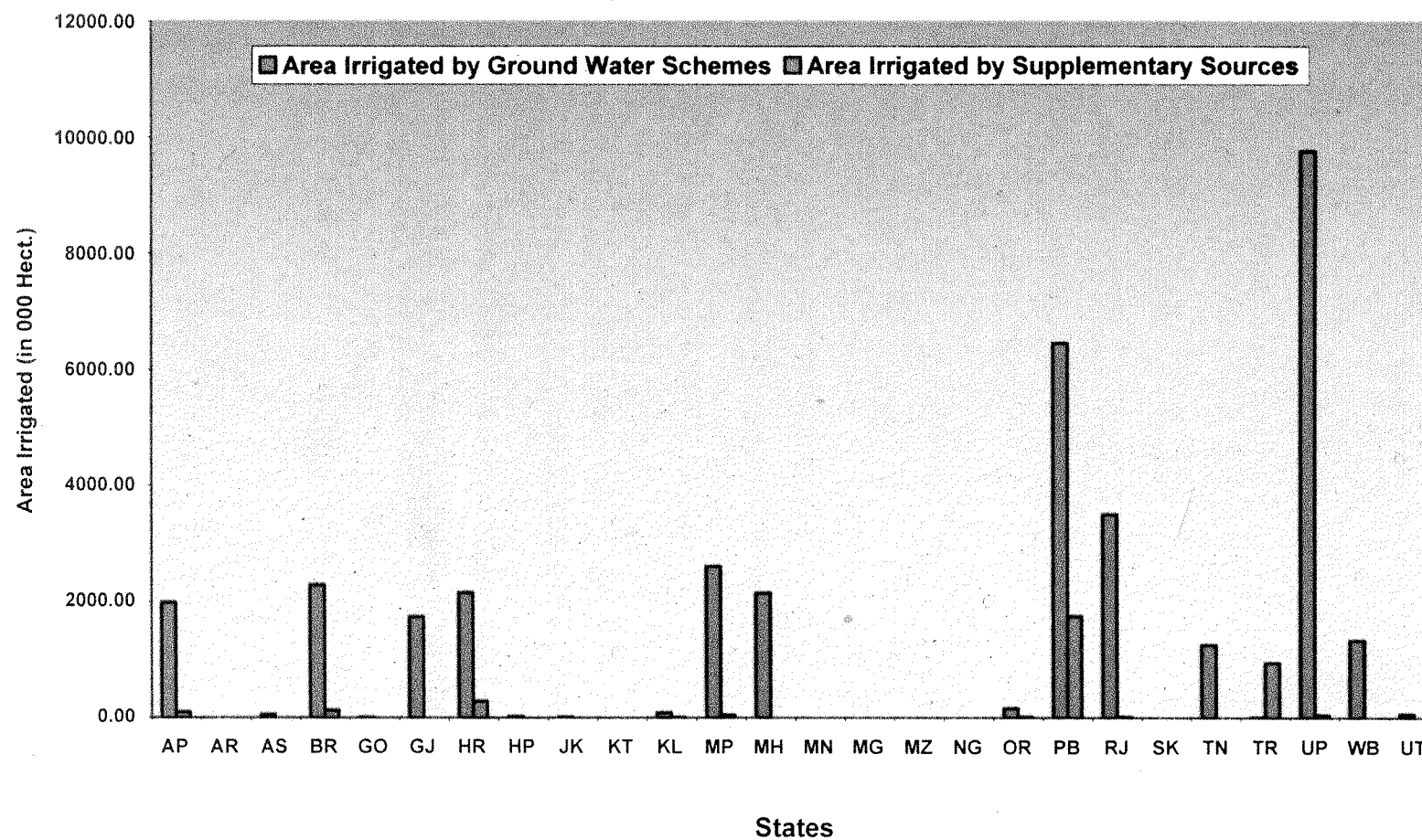
Minor Irrigation Census 1993-94
State-wise No. of Surface Lift Schemes in Use/Not in Use for M.I. works



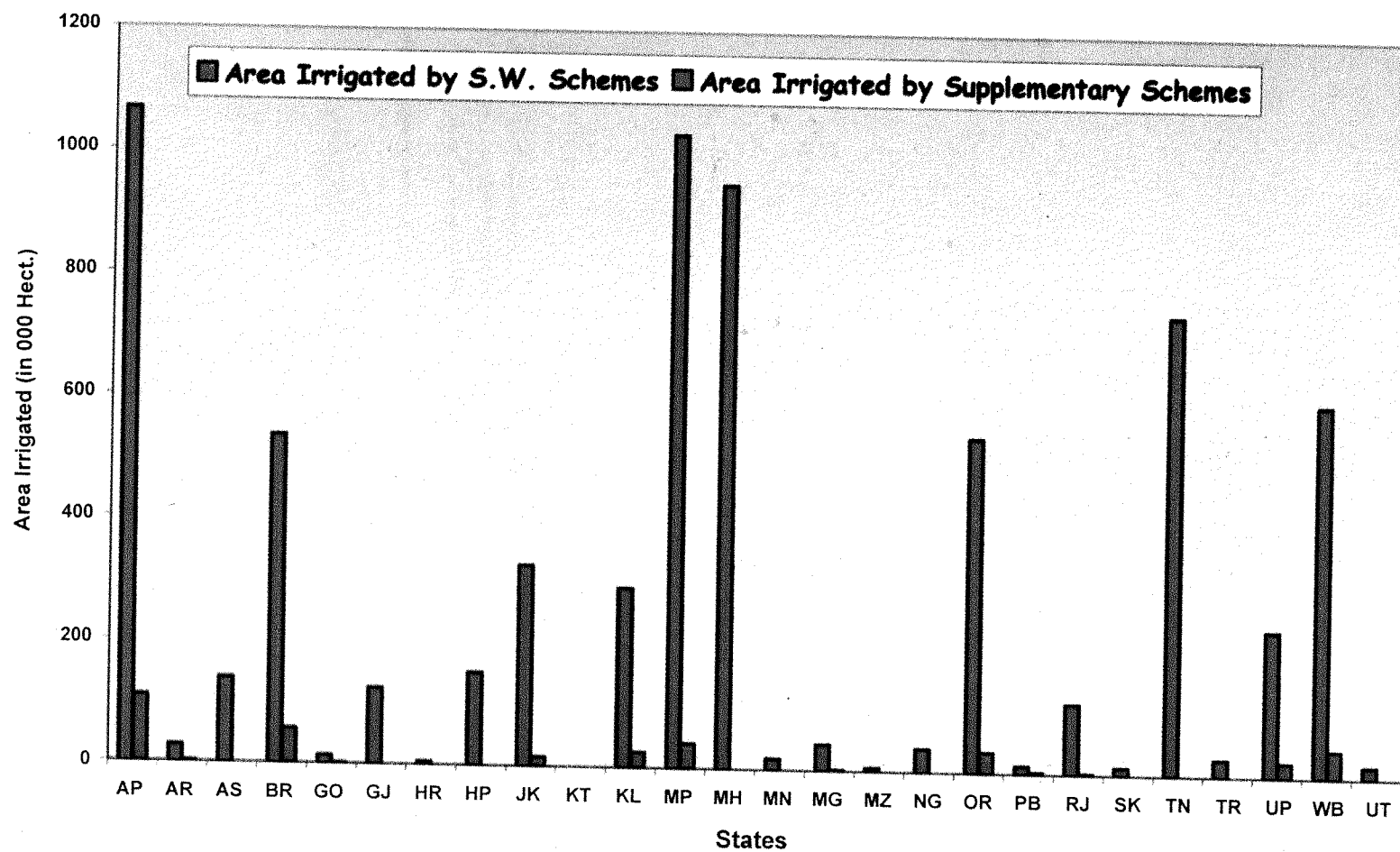
Minor Irrigation Census 1993-94 **State-wise Total Area Irrigated by Minor Irrigation works as Supplementary Source of** **irrigation in 1993-94**



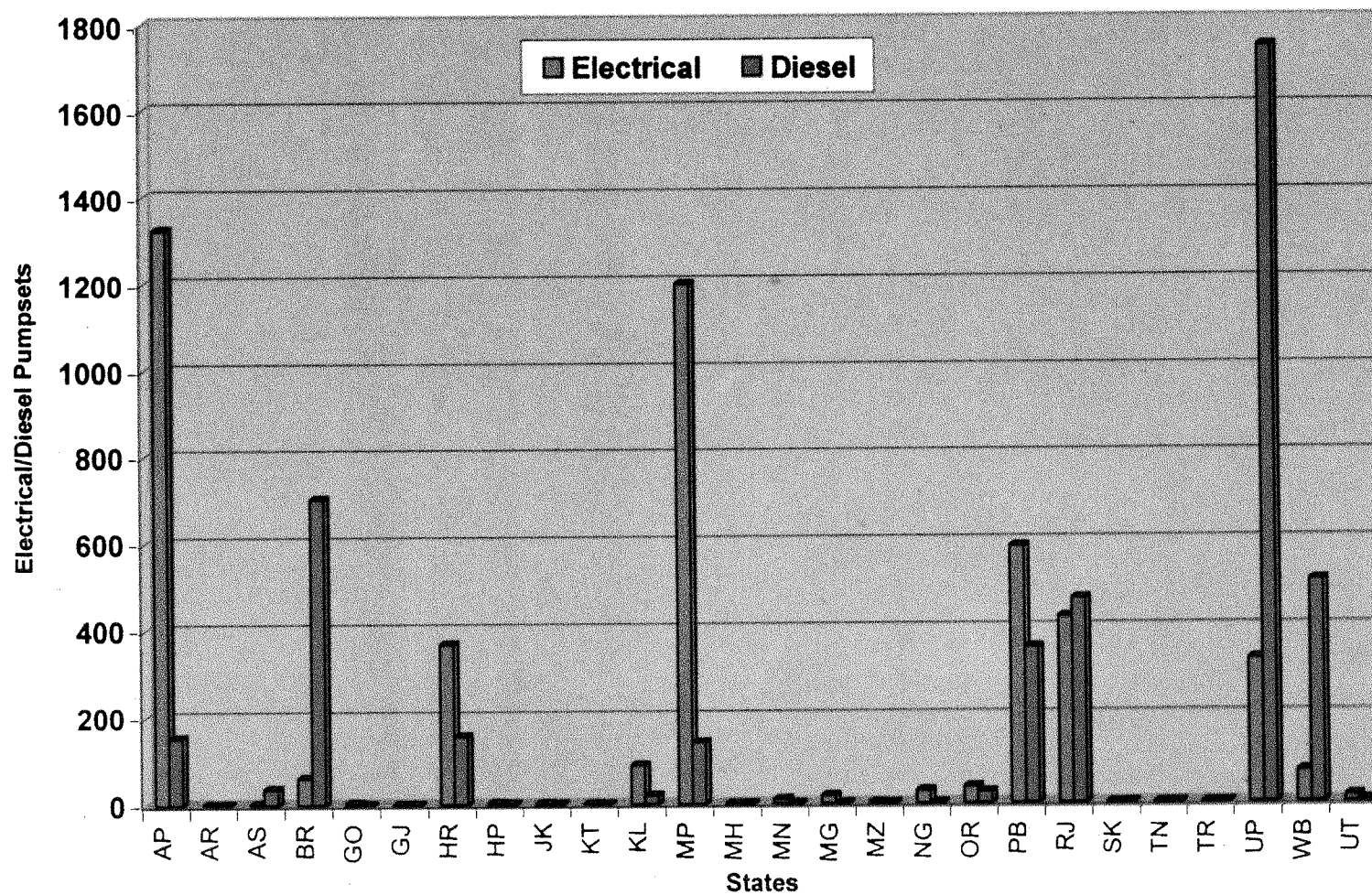
Minor Irrigation census 1993-94 **State-wise Area Irrigated by Ground Water Works as Supplementary Source of Irrigation in** **1993-94**



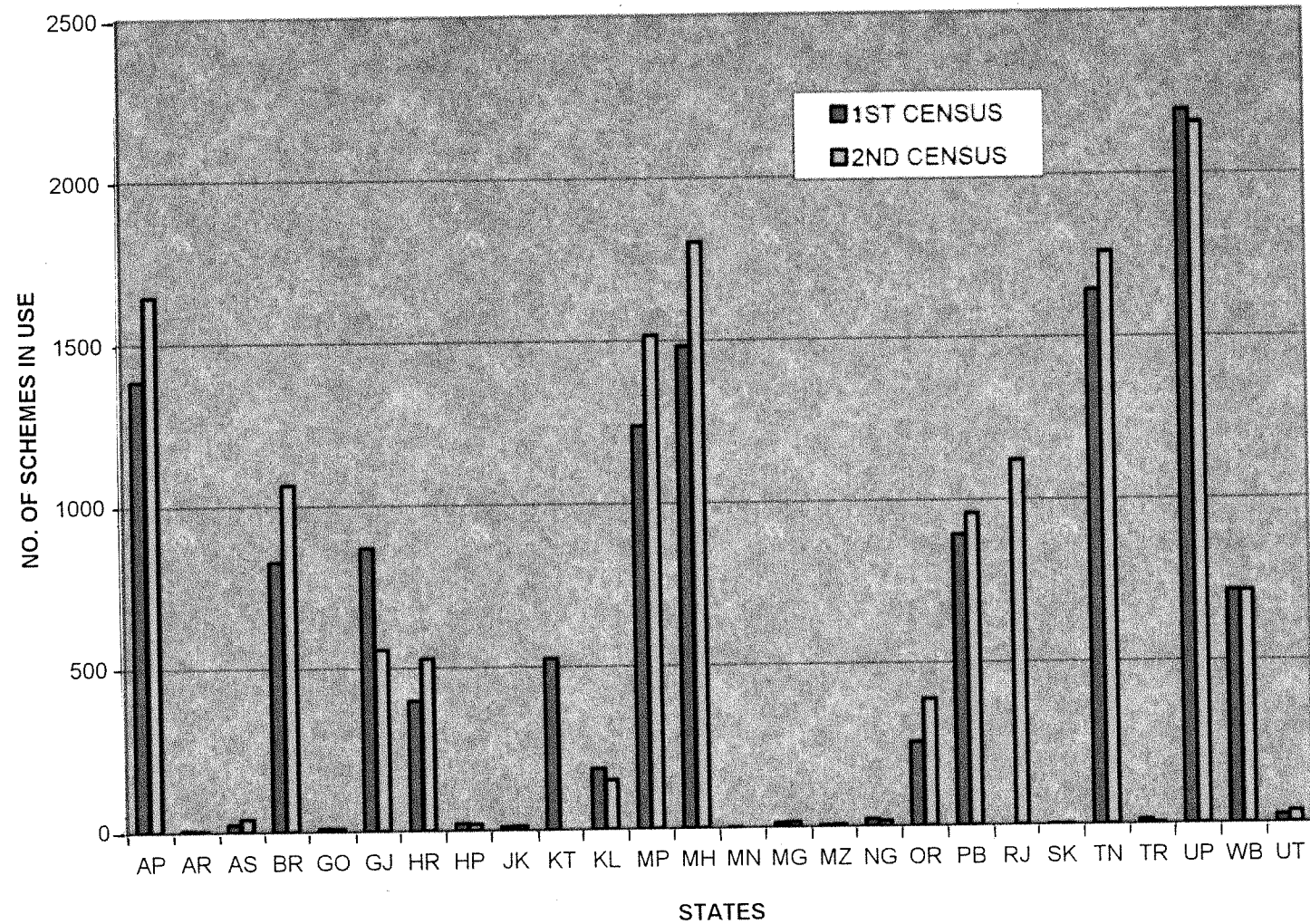
Minor Irrigation Census 1993-94
State-wise Area Irrigated by Surface Water(MI) Works as Supplementary Sources of irrigation
in 1993-94



Minor Irrigation Census (1993-94) **No. of Electrical/Diesel Pumpsets in use for Minor Irrigation Schemes**



Statewise Details of Number of Schemes in Use as per 1st and 2nd Census



STATISTICAL TABLES: STATEWISE

I . DUGWELLS

MINOR IRRIGATION CENSUS (1993-94)

Table 1.1 Construction of Dugwells over the year

(in Nos.)

Construction of Dugwells over the years										
Sl. No.	Name of State/UTs	Upto 1986-87	During 1987-88	During 1988-89	During 1989-90	During 1990-91	During 1991-92	During 1992-93	During 1993-94	Total (3 to 10)
1	2	3	4	5	6	7	8	9	10	11
1.	ANDHRA PRADESH	873200	93543	68716	56060	46706	33653	23908	20626	1216412
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0	0
3.	ASSAM	11	2	2	6	5	1	3	8	38
4.	BIHAR	171091	29630	37604	26719	41907	34353	27527	22367	391198
5.	GOA	2558	200	252	206	218	180	199	162	3975
6.	GUJARAT	0	0	0	0	0	0	0	0	0
7.	HARYANA	13104	3331	2680	3030	1603	1130	967	595	26440
8.	HIMACHAL PRADESH	1324	74	52	39	52	70	36	75	1722
9.	JAMMU & KASHMIR	1336	46	14	15	10	4	0	0	1425
10.	KARNATAKA	202891	30041	23282	19410	16002	10834	5968	13431	321859
11.	KERALA	29908	8407	7628	17103	20856	18129	13898	10766	126695
12.	MADHYA PRADESH	717172	69623	63090	63533	79651	50491	48514	34365	1126439
13.	MAHARASHTRA	0	0	0	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0	0	0	0
15.	MEGHALAYA	0	0	0	0	0	1	1	0	2
16.	MIZORAM	60	149	110	40	44	29	38	20	490
17.	NAGALAND	446	0	17	26	16	6	5	14	530
18.	ORISSA	204435	16550	12550	14960	20761	19782	18710	15349	323097
19.	PUNJAB	8591	825	733	521	415	260	191	135	11671
20.	RAJASTHAN	817915	47229	45256	35734	30775	26851	20074	19243	1043077
21.	SIKKIM	0	0	0	0	0	0	0	0	0
22.	TAMIL NADU	1082721	70511	38277	27229	20526	10940	5185	54399	1309788
23.	TRIPURA	114	40	52	33	61	109	79	317	805
24.	UTTAR PRADESH	79183	10798	9365	8537	8598	6869	5927	7047	136324
25.	WEST BENGAL	21454	4812	4224	4357	4512	3932	3984	8708	55983
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	154	15	26	59	52	22	47	38	413
28.	DELHI	0	0	0	0	0	0	0	0	0
29.	PONDICHERRY	153	16	16	8	17	4	2	6	222
Total :		4227821	385842	313946	277625	292787	217650	175263	207671	6098605

MINOR IRRIGATION CENSUS (1993-94)

Table 1.2 Distribution according to ownership

(in Nos.)

Sl. No.	Name of State/UTs	Dugwells Owned by						Total (3 to 8)
		Govt. Owned	Coop. Societies	Panchayat Owned	Group of farmers	Individual farmers	Others	
1	2	3	4	5	6	7	8	9
1.	ANDHRA PRADESH	2292	1908	347	120078	1091029	758	1216412
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0
3.	ASSAM	0	0	0	0	38	0	38
4.	BIHAR	17699	795	976	1647	369418	663	391198
5.	GOA	49	22	0	109	3782	13	3975
6.	GUJARAT	0	0	0	0	0	0	0
7.	HARYANA	95	38	270	15633	10371	33	26440
8.	HIMACHAL PRADESH	170	3	0	276	1271	2	1722
9.	JAMMU & KASHMIR	652	109	18	543	79	24	1425
10.	KARNATAKA	456	89	22	1071	319782	439	321859
11.	KERALA	365	23	231	106	125894	76	126695
12.	MADHYA PRADESH	18276	1316	1691	152030	951784	1342	1126439
13.	MAHARASHTRA	0	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0	0
15.	MEGHALAYA	2	0	0	0	0	0	2
16.	MIZORAM	1	0	0	0	489	0	490
17.	NAGALAND	0	0	0	1	528	1	530
18.	ORISSA	1172	113	128	346	321297	41	323097
19.	PUNJAB	21	3	15	74	11556	2	11671
20.	RAJASTHAN	27186	749	2027	688477	321859	2779	1043077
21.	SIKKIM	0	0	0	0	0	0	0
22.	TAMIL NADU	2233	1023	2848	185360	1076524	41800	1309788
23.	TRIPURA	83	9	15	3	694	1	805
24.	UTTAR PRADESH	130	12	505	21649	113975	53	136324
25.	WEST BENGAL	4205	171	3057	2414	44851	1285	55983
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	7	7	1	398	0	413
28.	DELHI	0	0	0	0	0	0	0
29.	PONDICHERRY	2	0	0	0	220	0	222
Total :		75089	6390	12157	1189818	4765839	49312	6098605

Table 1.3 Distribution of Dugwells according to the holding size

MINOR IRRIGATION CENSUS (1993-94)						
(in Nos.)						
According to Farmers' Holding size						
Sl. No.	Name of State/UTs	Marginal (0-1 ha)	Small (1-2 ha)	Medium (2-10 ha)	Big (>10 ha)	Total (3 to 6)
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	431898	425767	326547	26895	1211107
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	1	7	29	1	38
4.	BIHAR	186081	120136	59153	5695	371065
5.	GOA	2809	507	487	88	3891
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	1754	5826	17017	1407	26004
8.	HIMACHAL PRADESH	419	347	407	374	1547
9.	JAMMU & KASHMIR	679	179	338	229	1425
10.	KARNATAKA	80162	108531	112803	19357	320853
11.	KERALA	110005	12559	3230	206	126000
12.	MADHYA PRADESH	146245	289114	548084	120371	1103814
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0
15.	MEGHALAYA	0	0	0	0	0
16.	MIZORAM	212	217	60	0	489
17.	NAGALAND	185	255	88	1	529
18.	ORISSA	106688	127052	80223	7680	321643
19.	PUNJAB	1370	2320	7453	487	11630
20.	RAJASTHAN	93868	174826	671357	70285	1010336
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	674920	349856	216468	20640	1261884
23.	TRIPURA	546	107	42	2	697
24.	UTTAR PRADESH	48564	46589	37430	3041	135624
25.	WEST BENGAL	30072	12853	4102	238	47265
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	157	174	62	6	399
28.	DELHI	0	0	0	0	0
29.	PONDICHERRY	112	85	23	0	220
Total :		1916747	1677307	2085403	277003	5956460

MINOR IRRIGATION CENSUS (1993-94)

Table 1.4 Distribution of Dugwells according to social status

(in Nos.)							
Sl. No.	Name of State/UTs	According to Social Status of farmers				Owned by other than ind./group of farmers	Grand Total (6 + 7)
		Schedule Caste	Schedule Tribe	Others	Total (3+4+5)		
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	127732	85393	997982	1211107	5305	1216412
2.	ARUNACHAL PRADESH	0	0	0	0	0	0
3.	ASSAM	5	13	20	38	0	38
4.	BIHAR	49556	110994	210515	371065	20133	391198
5.	GOA	17	4	3870	3891	84	3975
6.	GUJARAT	0	0	0	0	0	0
7.	HARYANA	561	636	24807	26004	436	26440
8.	HIMACHAL PRADESH	121	15	1411	1547	175	1722
9.	JAMMU & KASHMIR	59	0	563	622	803	1425
10.	KARNATAKA	21157	14011	285685	320853	1006	321859
11.	KERALA	5025	771	120204	126000	695	126695
12.	MADHYA PRADESH	96482	157912	849420	1103814	22625	1126439
13.	MAHARASHTRA	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0
15.	MEGHALAYA	0	0	0	0	2	2
16.	MIZORAM	0	472	17	489	1	490
17.	NAGALAND	2	527	0	529	1	530
18.	ORISSA	40485	101489	179669	321643	1454	323097
19.	PUNJAB	581	107	10942	11630	41	11671
20.	RAJASTHAN	80451	103815	826070	1010336	32741	1043077
21.	SIKKIM	0	0	0	0	0	0
22.	TAMIL NADU	110202	15983	1135699	1261884	47904	1309788
23.	TRIPURA	122	167	408	697	108	805
24.	UTTAR PRADESH	21767	2192	111665	135624	700	136324
25.	WEST BENGAL	12839	7139	27287	47265	8718	55983
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	4	306	89	399	14	413
28.	DELHI	0	0	0	0	0	0
29.	PONDICHERRY	5	0	215	220	2	222
Total :		567173	601946	4786538	5955657	142948	6098605

MINOR IRRIGATION CENSUS(1993-94)

Table 1.5 Distribution of Dugwells by its type

(in Nos.)						
Sl. No.	Name of State/UTs	Type of Dugwells				Total (3 to 6)
		Pucca	Kuchcha	Dug-cum Borewell	Others	
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	346289	730558	133251	6314	1216412
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	11	10	17	0	38
4.	BIHAR	340630	25108	24570	890	391198
5.	GOA	2773	1188	11	3	3975
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	22587	1068	2438	347	26440
8.	HIMACHAL PRADESH	1374	306	39	3	1722
9.	JAMMU & KASHMIR	542	831	48	4	1425
10.	KARNATAKA	107000	182252	26915	5692	321859
11.	KERALA	96816	28360	632	887	126695
12.	MADHYA PRADESH	728017	362215	32260	3947	1126439
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0
15.	MEGHALAYA	2	0	0	0	2
16.	MIZORAM	425	59	0	6	490
17.	NAGALAND	269	260	0	1	530
18.	ORISSA	233558	86376	1320	1843	323097
19.	PUNJAB	10164	364	1050	93	11671
20.	RAJASTHAN	866975	98529	75744	1829	1043077
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	946748	299748	35955	27337	1309788
23.	TRIPURA	59	148	70	528	805
24.	UTTAR PRADESH	120074	9431	5843	976	136324
25.	WEST BENGAL	35108	19736	778	361	55983
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	401	6	1	5	413
28.	DELHI	0	0	0	0	0
29.	PONDICHERRY	5	9	208	0	222
Total :		3859827	1846562	341150	51066	6098605

MINOR IRRIGATION CENSUS (1993-94)

Table 1.6 Distribution of Dugwells by its status

(in Nos.)									
Sl. No.	Name of State/UTs	Wells In Use	Temporary	Abandoned (Salinity)	Dried up	Destroyed	Others	Total (4 to 8)	Grand Total (3 + 9)
1	2	3	4	5	6	7	8	9	10
1.	ANDHRA PRADESH	1018370	101833	7578	62782	15332	10517	198042	1216412
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0
3.	ASSAM	28	9	0	0	1	0	10	38
4.	BIHAR	354682	18257	309	8479	3133	6338	36516	391198
5.	GOA	3888	59	11	1	4	12	87	3975
6.	GUJARAT	0	0	0	0	0	0	0	0
7.	HARYANA	26252	0	0	0	0	188	188	26440
8.	HIMACHAL PRADESH	1703	9	1	6	2	1	19	1722
9.	JAMMU & KASHMIR	1403	22	0	0	0	0	22	1425
10.	KARNATAKA	271245	17260	4928	25010	1449	1967	50614	321859
11.	KERALA	126536	133	3	9	8	6	159	126695
12.	MADHYA PRADESH	1070280	9754	5313	13084	2895	25113	56159	1126439
13.	MAHARASHTRA	0	0	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0	0	0
15.	MEGHALAYA	2	0	0	0	0	0	0	2
16.	MIZORAM	403	62	1	2	5	17	87	490
17.	NAGALAND	232	230	0	0	3	65	298	530
18.	ORISSA	266403	48864	1071	2262	1967	2530	56694	323097
19.	PUNJAB	11511	125	31	2	0	2	160	11671
20.	RAJASTHAN	820032	212951	2250	5184	1011	1649	223045	1043077
21.	SIKKIM	0	0	0	0	0	0	0	0
22.	TAMIL NADU	1137980	92854	21563	28379	10559	18453	171808	1309788
23.	TRIPURA	800	2	1	1	1	0	5	805
24.	UTTAR PRADESH	121825	4540	6012	1791	263	1893	14499	136324
25.	WEST BENGAL	49862	4239	220	861	411	390	6121	55983
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	409	4	0	0	0	0	4	413
28.	DELHI	0	0	0	0	0	0	0	0
29.	PONDICHERRY	191	12	0	4	15	0	31	222
Total :		5284037	511219	49292	147857	37059	69141	814568	6098605

MINOR IRRIGATION CENSUS(1993-94)

Table 1.7 Distribution of Dugwells according to Finance source

(in Nos.)							
Source of Finance for constructing Dugwells							
Sl. No.	Name of State/UTs	Farmers Saving	Loan & Saving	Subsidy & Bank loan	Subsidy Only	Others	Total (3 to 7)
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	1027580	87785	35569	50190	12996	1214120
2.	ARUNACHAL PRADESH	0	0	0	0	0	0
3.	ASSAM	6	12	2	11	7	38
4.	BIHAR	164702	6843	14387	177085	10482	373499
5.	GOA	2443	394	763	218	108	3926
6.	GUJARAT	0	0	0	0	0	0
7.	HARYANA	8223	15400	2281	169	272	26345
8.	HIMACHAL PRADESH	847	162	32	497	14	1552
9.	JAMMU & KASHMIR	942	269	139	65	10	1425
10.	KARNATAKA	238985	60434	9993	1767	10224	321403
11.	KERALA	52422	14020	43625	10402	5861	126330
12.	MADHYA PRADESH	802183	130848	63937	29307	81888	1108163
13.	MAHARASHTRA	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0
15.	MEGHALAYA	0	0	0	0	0	0
16.	MIZORAM	35	0	5	383	66	489
17.	NAGALAND	25	0	0	502	3	530
18.	ORISSA	131422	33489	77729	72068	7217	321925
19.	PUNJAB	3072	8268	294	12	4	11650
20.	RAJASTHAN	913483	60628	20482	8862	12436	1015891
21.	SIKKIM	0	0	0	0	0	0
22.	TAMIL NADU	1200757	46725	26411	9300	24362	1307555
23.	TRIPURA	306	1	19	297	99	722
24.	UTTAR PRADESH	103935	17494	6592	6343	1830	136194
25.	WEST BENGAL	26494	2742	3615	16386	2541	51778
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	109	18	118	139	29	413
28.	DELHI	0	0	0	0	0	0
29.	PONDICHERRY	182	29	0	0	9	220
Total :		4678153	485561	305993	384003	170458	6024168

MINOR IRRIGATION CENSUS (1993-94)

Table 1.8 Dugwells according to water distribution system

(in Nos.)							
According to Water Distribution System							
Sl. No.	Name of State/UTs	Sprinkler	Drip Irri.	Open Channel	Under gr. Channel	Others	Total (3 to 7)
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	6829	5340	1116106	41769	46368	1216412
2.	ARUNACHAL PRADESH	0	0	0	0	0	0
3.	ASSAM	0	0	36	0	2	38
4.	BIHAR	5745	2559	342930	5728	34236	391198
5.	GOA	462	73	2338	196	906	3975
6.	GUJARAT	0	0	0	0	0	0
7.	HARYANA	6158	762	15978	2910	632	26440
8.	HIMACHAL PRADESH	6	3	1610	45	58	1722
9.	JAMMU & KASHMIR	0	0	322	11	1092	1425
10.	KARNATAKA	20537	4256	224764	19577	52725	321859
11.	KERALA	1332	1683	66691	16742	40247	126695
12.	MADHYA PRADESH	40858	6303	863215	151860	64203	1126439
13.	MAHARASHTRA	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0
15.	MEGHALAYA	0	0	2	0	0	2
16.	MIZORAM	0	194	181	7	108	490
17.	NAGALAND	0	0	0	3	527	530
18.	ORISSA	1860	570	257147	1102	62418	323097
19.	PUNJAB	158	204	11271	23	15	11671
20.	RAJASTHAN	149136	12921	715914	20097	145009	1043077
21.	SIKKIM	0	0	0	0	0	0
22.	TAMIL NADU	74121	12565	1116153	31852	75097	1309788
23.	TRIPURA	26	0	436	16	327	805
24.	UTTAR PRADESH	5404	1459	115456	950	13055	136324
25.	WEST BENGAL	2594	641	46100	724	5924	55983
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	19	353	36	5	413
28.	DELHI	0	0	0	0	0	0
29.	PONDICHERRY	7	9	196	10	0	222
Total :		315233	49561	4897199	293658	542954	6098605

MINOR IRRIGATION CENSUS(1993-94)

Table 1.9 Dugwells according to water lifting device

(in Nos.)								
According to Water Lifting Devices for Dugwells								
Sl. No.	Name of State/UTs	Electric Pumps	Diesel Pumps	Wind Mills	Solar Pumps	Man/Ani. operated	Others	Total (3 to 8)
1	2	3	4	5	6	7	8	9
1.	ANDHRA PRADESH	980492	130834	2053	310	95001	7722	1216412
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0
3.	ASSAM	0	28	0	0	9	1	38
4.	BIHAR	17660	148265	827	379	210208	13859	391198
5.	GOA	2399	275	3	1	1254	43	3975
6.	GUJARAT	0	0	0	0	0	0	0
7.	HARYANA	19697	6448	116	26	64	89	26440
8.	HIMACHAL PRADESH	1086	324	2	1	305	4	1722
9.	JAMMU & KASHMIR	283	87	0	0	1046	9	1425
10.	KARNATAKA	265105	24597	1817	506	10181	19653	321859
11.	KERALA	79405	14784	73	108	28840	3485	126695
12.	MADHYA PRADESH	920448	90560	3501	353	106607	4970	1126439
13.	MAHARASHTRA	0	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0	0
15.	MEGHALAYA	0	0	0	0	2	0	2
16.	MIZORAM	0	0	0	0	490	0	490
17.	NAGALAND	15	176	0	0	1	338	530
18.	ORISSA	15911	14159	292	193	287205	5337	323097
19.	PUNJAB	7001	3976	269	9	339	77	11671
20.	RAJASTHAN	401688	421754	3047	956	132432	83200	1043077
21.	SIKKIM	0	0	0	0	0	0	0
22.	TAMIL NADU	877022	241872	10551	1343	161995	17005	1309788
23.	TRIPURA	3	14	0	0	717	71	805
24.	UTTAR PRADESH	10772	112013	479	486	10474	2100	136324
25.	WEST BENGAL	1086	15642	207	38	33008	6002	55983
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	180	233	0	0	0	0	413
28.	DELHI	0	0	0	0	0	0	0
29.	PONDICHERRY	215	4	0	0	0	3	222
Total :		3600468	1226045	23237	4709	1080178	163968	6098605

MINOR IRRIGATION CENSUS(1993-94)

Table 1.10 Dugwells according to horse power

(in Nos.)									
According to horse power of lifting devices									
Sl. No.	Name of State/UTs	0-2 hp	2-4 hp	4-6 hp	6-8 hp	8-10 hp	Above 10 hp	Unspecified hp = 0	Total (3 to 9)
1	2	3	4	5	6	7	8	9	10
1.	ANDHRA PRADESH	6447	594209	491955	19360	6294	3146	95001	1216412
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0
3.	ASSAM	0	0	29	0	0	0	9	38
4.	BIHAR	53942	12902	105555	5446	785	1008	211560	391198
5.	GOA	1335	767	503	38	49	29	1254	3975
6.	GUJARAT	0	0	0	0	0	0	0	0
7.	HARYANA	445	267	7584	12044	4688	1348	64	26440
8.	HIMACHAL PRADESH	92	97	679	348	136	65	305	1722
9.	JAMMU & KASHMIR	32	75	374	325	0	599	20	1425
10.	KARNATAKA	42730	90405	162151	8526	6852	1014	10181	321859
11.	KERALA	74339	17356	4886	487	415	372	28840	126695
12.	MADHYA PRADESH	19155	609386	354533	29104	4825	2829	106607	1126439
13.	MAHARASHTRA	0	0	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0	0	0
15.	MEGHALAYA	0	0	0	0	0	0	2	2
16.	MIZORAM	0	0	0	0	0	0	490	490
17.	NAGALAND	18	1	181	1	0	0	329	530
18.	ORISSA	20638	6477	8520	23	46	188	287205	323097
19.	PUNJAB	725	2038	5329	2775	172	293	339	11671
20.	RAJASTHAN	5679	37107	290958	239871	88913	38612	341937	1043077
21.	SIKKIM	0	0	0	0	0	0	0	0
22.	TAMIL NADU	30618	335948	684390	68659	9265	7549	173359	1309788
23.	TRIPURA	1	0	84	0	0	3	717	805
24.	UTTAR PRADESH	5762	1682	8762	96989	10378	1306	11445	136324
25.	WEST BENGAL	2208	6923	13791	0	0	0	33061	55983
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	3	151	236	0	10	13	0	413
28.	DELHI	0	0	0	0	0	0	0	0
29.	PONDICHERRY	1	0	116	89	7	9	0	222
Total :		264170	1715791	2140616	484085	132835	58383	1302725	6098605

MINOR IRRIGATION CENSUS(1993-94)

Table 1.11 Dugwells in the command of Major/Medium projects and average pumping hours

(in Nos.)

Sl. No.	Name of State/UTs	Location of Dugwells			According to Average Pumping Hours during peak season						
		On the Maj/Med	Outside Command	Total (3 + 4)	0-4 hrs	4-8 hrs	8-12 hrs	12-16 hrs	16-20 hrs	20-24 hrs	Total (6 to 11)
1	2	3	4	5	6	7	8	9	10	11	12
1.	ANDHRA PRADESH	82954	1133458	1216412	781313	348115	69160	12388	4034	1402	1216412
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0	0	0
3.	ASSAM	0	38	38	29	9	0	0	0	0	38
4.	BIHAR	15976	375222	391198	242384	130571	16633	906	315	389	391198
5.	GOA	203	3772	3975	3514	445	15	0	0	1	3975
6.	GUJARAT	0	0	0	0	0	0	0	0	0	0
7.	HARYANA	6309	20131	26440	3502	18739	4013	162	23	1	26440
8.	HIMACHAL PRADESH	27	1695	1722	944	616	133	14	10	5	1722
9.	JAMMU & KASHMIR	112	1313	1425	490	935	0	0	0	0	1425
10.	KARNATAKA	56077	265782	321859	202270	97952	16438	2216	1374	1609	321859
11.	KERALA	4929	121766	126695	113685	11506	1058	248	96	102	126695
12.	MADHYA PRADESH	20103	1106336	1126439	320849	420788	246091	88083	49372	1256	1126439
13.	MAHARASHTRA	0	0	0	0	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0	0	0	0	0
15.	MEGHALAYA	0	2	2	2	0	0	0	0	0	2
16.	MIZORAM	1	489	490	490	0	0	0	0	0	490
17.	NAGALAND	0	530	530	345	183	2	0	0	0	530
18.	ORISSA	15479	307618	323097	318481	4021	428	81	46	40	323097
19.	PUNJAB	5387	6284	11671	1160	4669	5665	128	16	33	11671
20.	RAJASTHAN	10364	1032713	1043077	579450	398342	49940	7332	4864	3149	1043077
21.	SIKKIM	0	0	0	0	0	0	0	0	0	0
22.	TAMIL NADU	211586	1098202	1309788	948819	306738	42942	6773	3141	1375	1309788
23.	TRIPURA	0	805	805	270	96	60	32	0	347	805
24.	UTTAR PRADESH	34278	102046	136324	83351	43345	7807	1081	337	403	136324
25.	WEST BENGAL	5134	50849	55983	48620	7363	0	0	0	0	55983
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	41	372	413	314	74	25	0	0	0	413
28.	DELHI	0	0	0	0	0	0	0	0	0	0
29.	PONDICHERRY	1	221	222	31	55	87	37	11	1	222
Total :		468961	5629644	6098605	3650313	1794562	460497	119481	63639	10113	6098605

MINOR IRRIGATION CENSUS (1993-94)

Table 1.12 Average length of Water Conveyance Channel

(in Mts.)						
Sl. No.	Name of State/UTs	Total Number of Dugwells	Average length of channels			
			Pucca Channel	Kuccha Channel	Under gr. Channel	Total (4+5+6)
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	1216412	3	55	4	62
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	38	17	104	2	123
4.	BIHAR	391198	3	61	7	71
5.	GOA	3975	23	68	42	133
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	26440	29	127	8	164
8.	HIMACHAL PRADESH	1722	10	77	20	107
9.	JAMMU & KASHMIR	1425	51	100	0	151
10.	KARNATAKA	321859	19	48	14	81
11.	KERALA	126695	5	45	23	73
12.	MADHYA PRADESH	1126439	1	41	20	62
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0
15.	MEGHALAYA	2	0	5	0	5
16.	MIZORAM	490	42	70	0	112
17.	NAGALAND	530	7	2	0	9
18.	ORISSA	323097	0	13	0	13
19.	PUNJAB	11671	8	249	7	264
20.	RAJASTHAN	1043077	11	104	10	125
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	1309788	15	27	3	45
23.	TRIPURA	805	2	65	13	80
24.	UTTAR PRADESH	136324	8	92	1	101
25.	WEST BENGAL	55983	0	82	1	83
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	413	3	44	0	47
28.	DELHI	0	0	0	0	0
29.	PONDICHERRY	222	1	94	2	97
Total :		6098605	258	1573	177	2008

MINOR IRRIGATION CENSUS (1993-94)

Table 1.13 Culturable Command Area and Potential Created

(in Ha.)							
Sl. No.	Name of State/UTs	Culturable Command Area	Irrigation Potential Created				
			Khariif	Rabi	Perennial	Others	Total
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	1351835	1045144	760396	66671	14672	1886883
2.	ARUNACHAL PRADESH	0	0	0	0	0	0
3.	ASSAM	77	67	39	0	6	112
4.	BIHAR	337023	202704	229971	25027	15923	473625
5.	GOA	3777	13	999	2240	585	3837
6.	GUJARAT	0	0	0	0	0	0
7.	HARYANA	60451	60448	60451	0	0	120899
8.	HIMACHAL PRADESH	3090	2381	2726	91	32	5230
9.	JAMMU & KASHMIR	786	665	612	0	0	1277
10.	KARNATAKA	521861	332229	179990	93818	46597	652634
11.	KERALA	72703	9904	10945	50086	15236	86171
12.	MADHYA PRADESH	2365369	610332	2171037	23925	5134	2810428
13.	MAHARASHTRA	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0
15.	MEGHALAYA	6	6	6	0	0	12
16.	MIZORAM	820	477	335	18	2	832
17.	NAGALAND	759	547	342	1	1	891
18.	ORISSA	137621	107103	81294	10018	7528	205943
19.	PUNJAB	48584	43781	48302	1279	845	94207
20.	RAJASTHAN	2976879	296468	3168870	19210	57958	3542506
21.	SIKKIM	0	0	0	0	0	0
22.	TAMIL NADU	6240909	3237480	3374749	894347	766430	8273006
23.	TRIPURA	993	652	728	170	86	1636
24.	UTTAR PRADESH	384821	115625	274365	48834	32872	471696
25.	WEST BENGAL	24386	20613	15664	1050	2552	39879
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	618	415	230	174	35	854
28.	DELHI	0	0	0	0	0	0
29.	PONDICHERRY	241	148	195	68	17	428
Total :		14533609	6087202	10382246	1237027	966511	18672986

MINOR IRRIGATION CENSUS (1993-94)

Table 1.14 Irrigation Potential Utilised

(in Ha.)						
Sl. No.	Name of State/UTs	Actual Area Irrigated during 1993-94				
		Kharif	Rabi	Perennial	Others	Total
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	676518	499160	58911	10577	1245166
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	30	16	0	1	47
4.	BIHAR	139148	160852	15819	8834	324653
5.	GOA	9	935	2086	408	3438
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	60448	60451	0	0	120899
8.	HIMACHAL PRADESH	1993	2465	47	22	4527
9.	JAMMU & KASHMIR	585	533	0	0	1118
10.	KARNATAKA	253823	142621	76176	28334	500954
11.	KERALA	8866	9583	47369	13493	79311
12.	MADHYA PRADESH	221083	1776693	18507	4444	2020727
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0
15.	MEGHALAYA	6	5	0	0	11
16.	MIZORAM	362	247	6	0	615
17.	NAGALAND	234	87	1	0	322
18.	ORISSA	45880	36847	7912	1146	91785
19.	PUNJAB	36173	41369	1666	579	79787
20.	RAJASTHAN	160598	2870268	23905	31723	3086494
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	1807696	1716097	616804	187989	4328586
23.	TRIPURA	410	649	14	48	1121
24.	UTTAR PRADESH	72550	227057	19201	25744	344552
25.	WEST BENGAL	8115	12111	732	1502	22460
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	393	170	157	22	742
28.	DELHI	0	0	0	0	0
29.	PONDICHERRY	136	174	66	17	393
Total :		3495056	7558390	889379	314883	12257708

MINOR IRRIGATION CENSUS (1993-94)

Table 1.15 Irrigation through supplementary sources

(in Ha.)						
Sl. No.	Name of State/UTs	Supplementary Irrigation in 1993-94				
		Kharif	Rabi	Perennial	Others	Total
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	16895	8794	1371	287	27347
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	0	0	0	0	0
4.	BIHAR	9116	14581	728	478	24903
5.	GOA	0	24	170	12	206
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	9124	10806	0	0	19930
8.	HIMACHAL PRADESH	0	0	0	0	0
9.	JAMMU & KASHMIR	60	43	0	0	103
10.	KARNATAKA	31089	11066	6030	3556	51741
11.	KERALA	939	1102	234	485	2760
12.	MADHYA PRADESH	12833	21596	51	577	35057
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0
15.	MEGHALAYA	0	0	0	0	0
16.	MIZORAM	0	0	0	0	0
17.	NAGALAND	0	0	0	0	0
18.	ORISSA	2363	675	2531	65	5634
19.	PUNJAB	7337	7265	202	93	14897
20.	RAJASTHAN	890	11678	122	295	12985
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	152883	156490	43789	30906	384068
23.	TRIPURA	0	0	0	0	0
24.	UTTAR PRADESH	12295	8519	988	453	22255
25.	WEST BENGAL	674	775	52	81	1582
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0
28.	DELHI	0	0	0	0	0
29.	PONDICHERRY	0	0	0	0	0
Total :		256498	253414	56268	37288	603468

MINOR IRRIGATION CENSUS (1993-94)

Table 1.16 Dugwells according to the constraints

(in Nos.)									
Sl. No.	Name of State/UTs	No. of Dugwells in use	No. of Dugwells with no cons'ts	Constraints in utilisation of Irri. Pot. Created					Grand Total
				Inadequate Powers	Mechanical Break down	Less Water Discharge	Other Reason	Total (5 to 8)	(4 + 9)
1	2	3	4	5	6	7	8	9	10
1.	ANDHRA PRADESH	1018370	471138	43643	6555	440016	57018	547232	1018370
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0
3.	ASSAM	28	0	5	3	3	17	28	28
4.	BIHAR	354682	2892	21735	11834	156236	161985	351790	354682
5.	GOA	3888	0	138	20	342	3388	3888	3888
6.	GUJARAT	0	0	0	0	0	0	0	0
7.	HARYANA	26252	0	5713	507	856	19176	26252	26252
8.	HIMACHAL PRADESH	1703	1088	41	11	71	492	615	1703
9.	JAMMU & KASHMIR	1403	0	0	0	0	0	0	0
10.	KARNATAKA	271245	138622	61879	4460	53691	12593	132623	271245
11.	KERALA	126536	0	3836	855	19253	102592	126536	126536
12.	MADHYA PRADESH	1070280	307764	13142	4218	308131	437025	762516	1070280
13.	MAHARASHTRA	0	0	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0	0	0
15.	MEGHALAYA	2	0	0	0	2	0	2	2
16.	MIZORAM	403	403	0	0	0	0	0	403
17.	NAGALAND	232	0	20	0	1	211	232	232
18.	ORISSA	266403	43649	3488	858	34669	183739	222754	266403
19.	PUNJAB	11511	0	7723	76	238	3474	11511	11511
20.	RAJASTHAN	820032	692607	38014	4912	65254	19245	127425	820032
21.	SIKKIM	0	0	0	0	0	0	0	0
22.	TAMIL NADU	1137980	1427	36185	14713	466029	619626	1136553	1137980
23.	TRIPURA	800	362	0	1	368	69	438	800
24.	UTTAR PRADESH	121825	454	10876	3439	66186	40870	121371	121825
25.	WEST BENGAL	49862	0	1690	390	15311	32471	49862	49862
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	409	242	5	0	85	77	167	409
28.	DELHI	0	0	0	0	0	0	0	0
29.	PONDICHERRY	191	191	0	0	0	0	0	191
Total :		5284037	1660839	248133	52852	1626742	1694068	3621795	5282634

II. SHALLOW TUBEWELLS

MINOR IRRIGATION CENSUS (1993-94)

Table 2.1 Construction of Tubewell over the year

(in Nos.)

Sl. No.	Name of State/UTs.	Construction of Tubewell over the years								Total (3 to 10)
		Upto 1986-87	During 1987-88	During 1988-89	During 1989-90	During 1990-91	During 1991-92	During 1992-93	During 1993-94	
1	2	3	4	5	6	7	8	9	10	11
1.	ANDHRA PRADESH	98434	21466	25526	33878	38724	39474	33970	25725	317197
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0	0
3.	ASSAM	12578	3009	3383	3018	2279	1070	1084	651	27072
4.	BIHAR	138940	50333	65929	81313	84473	72003	57893	38635	589519
5.	GOA	6	0	0	9	6	4	3	0	28
6.	GUJARAT	0	0	0	0	0	0	0	0	0
7.	HARYANA	188204	77189	62100	65384	41461	29800	18545	11611	494294
8.	HIMACHAL PRADESH	798	122	137	188	107	76	134	62	1624
9.	JAMMU & KASHMIR	749	196	188	80	35	25	18	22	1313
10.	KARNATAKA	15143	5513	7260	8643	11134	10510	9644	11749	79596
11.	KERALA	217	189	228	247	346	511	267	359	2364
12.	MADHYA PRADESH	21675	6454	8712	13918	23226	18251	15894	13374	121504
13.	MAHARASHTRA	0	0	0	0	0	0	0	0	0
14.	MANIPUR	0	0	7	5	3	7	9	5	36
15.	MEGHALAYA	107	0	0	0	0	0	0	3	110
16.	MIZORAM	0	0	0	0	0	0	0	0	0
17.	NAGALAND	2	0	0	0	0	0	0	4	6
18.	ORISSA	6362	961	1154	1688	2457	1846	1785	1842	18095
19.	PUNJAB	590694	104769	75034	63051	44708	30744	20145	15064	944209
20.	RAJASTHAN	26134	6513	6664	5946	5221	5147	3811	3663	63099
21.	SIKKIM	0	0	0	0	0	0	0	0	0
22.	TAMIL NADU	45199	7339	6445	5580	4394	3002	1989	2373	76321
23.	TRIPURA	54	26	18	8	9	7	0	14	136
24.	UTTAR PRADESH	616761	201660	210104	208232	229437	188366	159089	168917	1982566
25.	WEST BENGAL	114586	56049	54105	60384	65693	53862	45268	54691	504638
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0	0	0	0
28.	DELHI	4807	956	818	744	641	460	338	256	9020
29.	PONDICHERRY	2769	253	271	141	180	95	80	106	3895
Total :		1884219	542997	528083	552457	554534	455260	369966	349126	5236642

MINOR IRRIGATION CENSUS (1993-94)

Table 2.2 Distribution according to ownership

(in Nos.)								
Tubewell Owned by								
Sl. No.	Name of State/UTs.	Govt. Owned	Coop. Societies	Panchayat Owned	Group of farmers	Individual farmers	Others	Total (3 to 8)
1	2	3	4	5	6	7	8	9
1.	ANDHRA PRADESH	824	519	126	15644	299697	387	317197
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0
3.	ASSAM	2443	38	0	722	23867	2	27072
4.	BIHAR	3849	562	549	488	583406	665	589519
5.	GOA	0	1	0	6	21	0	28
6.	GUJARAT	0	0	0	0	0	0	0
7.	HARYANA	865	618	2811	260942	228388	670	494294
8.	HIMACHAL PRADESH	276	1	1	66	1280	0	1624
9.	JAMMU & KASHMIR	185	202	16	244	622	44	1313
10.	KARNATAKA	95	53	10	560	78825	53	79596
11.	KERALA	45	2	7	4	2300	6	2364
12.	MADHYA PRADESH	806	116	136	5338	115048	60	121504
13.	MAHARASHTRA	0	0	0	0	0	0	0
14.	MANIPUR	36	0	0	0	0	0	36
15.	MEGHALAYA	1	0	0	2	107	0	110
16.	MIZORAM	0	0	0	0	0	0	0
17.	NAGALAND	0	0	0	0	6	0	6
18.	ORISSA	1583	15	12	131	16339	15	18095
19.	PUNJAB	538	101	311	570	942618	71	944209
20.	RAJASTHAN	139	67	12	32471	30366	44	63099
21.	SIKKIM	0	0	0	0	0	0	0
22.	TAMIL NADU	77	31	68	752	74727	666	76321
23.	TRIPURA	8	19	1	1	107	0	136
24.	UTTAR PRADESH	951	102	310	7777	1973360	66	1982566
25.	WEST BENGAL	8146	2608	4395	9988	478469	1032	504638
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0	0
28.	DELHI	0	0	0	0	9020	0	9020
29.	PONDICHERRY	49	3	1	4	3826	12	3895
Total :		20916	5058	8766	335710	4862399	3793	5236642

(in Nos.)						
According to Farmers' Holding size						
Sl. No.	Name of State/UTs	Marginal (0-1 ha)	Small (1-2 ha)	Medium (2-10 ha)	Big (>10 ha)	Total (3 to 6)
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	96313	109545	102148	7335	315341
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	500	3618	20400	71	24589
4.	BIHAR	246884	195614	129589	11807	583894
5.	GOA	6	12	8	1	27
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	38122	110512	313569	27127	489330
8.	HIMACHAL PRADESH	374	364	476	132	1346
9.	JAMMU & KASHMIR	402	426	402	83	1313
10.	KARNATAKA	14449	28835	32063	4038	79385
11.	KERALA	1976	241	84	3	2304
12.	MADHYA PRADESH	6654	18858	62960	31914	120386
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0
15.	MEGHALAYA	10	39	42	18	109
16.	MIZORAM	0	0	0	0	0
17.	NAGALAND	1	1	4	0	6
18.	ORISSA	4425	6521	5134	390	16470
19.	PUNJAB	107938	190988	573586	70676	943188
20.	RAJASTHAN	4176	13193	42567	2901	62837
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	33697	23476	16748	1558	75479
23.	TRIPURA	78	7	7	16	108
24.	UTTAR PRADESH	862395	643856	440148	34738	1981137
25.	WEST BENGAL	240771	174185	68190	5311	488457
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0
28.	DELHI	3148	3404	2423	45	9020
29.	PONDICHERY	1856	1287	678	9	3830
Total :		1664175	1524982	1811226	198173	5198556

Table 2.4 MINOR IRRIGATION CENSUS (1993-94)
Distribution of Tubewell according to social status

(in Nos.)							
Sl. No.	Name of State/UTs.	According to Social Status of farmers				Owned by other than ind./group of farmers	Grand Total (6 + 7)
		Schedule Caste	Schedule Tribe	Others	Total (3 + 4 + 5)		
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	22765	11634	280942	315341	1856	317197
2.	ARUNACHAL PRADESH	0	0	0	0	0	0
3.	ASSAM	1719	4890	17980	24589	2483	27072
4.	BIHAR	54349	8856	520689	583894	5625	589519
5.	GOA	0	0	27	27	1	28
6.	GUJARAT	0	0	0	0	0	0
7.	HARYANA	12606	13298	463426	489330	4964	494294
8.	HIMACHAL PRADESH	70	5	1271	1346	278	1624
9.	JAMMU & KASHMIR	273	0	593	866	447	1313
10.	KARNATAKA	5715	3572	70098	79385	211	79596
11.	KERALA	52	12	2240	2304	60	2364
12.	MADHYA PRADESH	4979	3421	111986	120386	1118	121504
13.	MAHARASHTRA	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	36	36
15.	MEGHALAYA	0	108	1	109	1	110
16.	MIZORAM	0	0	0	0	0	0
17.	NAGALAND	0	6	0	6	0	6
18.	ORISSA	3139	283	13048	16470	1625	18095
19.	PUNJAB	32060	10782	900346	943188	1021	944209
20.	RAJASTHAN	5348	7965	49524	62837	262	63099
21.	SIKKIM	0	0	0	0	0	0
22.	TAMIL NADU	5147	841	69491	75479	842	76321
23.	TRIPURA	23	18	67	108	28	136
24.	UTTAR PRADESH	261511	29840	1689786	1981137	1429	1982566
25.	WEST BENGAL	92696	11106	384655	488457	16181	504638
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0
28.	DELHI	287	31	8702	9020	0	9020
29.	PONDICHERRY	63	10	3757	3830	65	3895
Total :		502802	106678	4588629	5198109	38533	5236642

MINOR IRRIGATION CENSUS (1993-94)

Table 2.5 Distribution of Tubewell by its type

(in Nos.)						
Type of Tubewells						
Sl. No.	Name of State/UTs.	Shallow	Filter	Borewell	Others	Total (3 to 6)
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	223688	43738	48000	1771	317197
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	26759	209	22	82	27072
4.	BIHAR	537520	9694	29414	12891	589519
5.	GOA	9	7	11	1	28
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	458222	13732	16891	5449	494294
8.	HIMACHAL PRADESH	1465	20	136	3	1624
9.	JAMMU & KASHMIR	1313	0	0	0	1313
10.	KARNATAKA	26590	4055	45685	3266	79596
11.	KERALA	1107	1021	225	11	2364
12.	MADHYA PRADESH	95843	1985	23080	596	121504
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	36	0	0	0	36
15.	MEGHALAYA	109	0	1	0	110
16.	MIZORAM	0	0	0	0	0
17.	NAGALAND	6	0	0	0	6
18.	ORISSA	15894	1615	548	38	18095
19.	PUNJAB	803958	68916	64036	7299	944209
20.	RAJASTHAN	56519	775	5543	262	63099
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	46454	11323	13751	4793	76321
23.	TRIPURA	108	22	4	2	136
24.	UTTAR PRADESH	1874453	32013	61851	14249	1982566
25.	WEST BENGAL	462701	26873	8052	7012	504638
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0
28.	DELHI	8914	14	88	4	9020
29.	PONDICHERY	2661	38	1194	2	3895
Total :		4644329	216050	318532	57731	5236642

MINOR IRRIGATION CENSUS (1993-94)

Table 2.6 Distribution of Tubewell by its status

(in Nos.)									
Sl. No.	Name of State/UTs.	T'wells In Use	Temporary	Abandoned (Salinity)	Dried up	Destroyed	Others	Total (4 to 8)	Grand Total (3 + 9)
1	2	3	4	5	6	7	8	9	10
1.	ANDHRA PRADESH	304358	8294	651	3061	312	521	12839	317197
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0
3.	ASSAM	20158	6187	48	193	235	251	6914	27072
4.	BIHAR	575252	6892	720	3246	2152	1257	14267	589519
5.	GOA	26	0	0	0	0	2	2	28
6.	GUJARAT	0	0	0	0	0	0	0	0
7.	HARYANA	492159	0	0	0	0	2135	2135	494294
8.	HIMACHAL PRADESH	1604	18	0	1	1	0	20	1624
9.	JAMMU & KASHMIR	1302	11	0	0	0	0	11	1313
10.	KARNATAKA	75469	1958	985	750	115	319	4127	79596
11.	KERALA	2344	8	2	6	1	3	20	2364
12.	MADHYA PRADESH	119243	727	240	498	63	733	2261	121504
13.	MAHARASHTRA	0	0	0	0	0	0	0	0
14.	MANIPUR	36	0	0	0	0	0	0	36
15.	MEGHALAYA	110	0	0	0	0	0	0	110
16.	MIZORAM	0	0	0	0	0	0	0	0
17.	NAGALAND	6	0	0	0	0	0	0	6
18.	ORISSA	15284	2173	151	132	166	189	2811	18095
19.	PUNJAB	938503	4361	1052	142	73	78	5706	944209
20.	RAJASTHAN	58595	4336	60	64	22	22	4504	63099
21.	SIKKIM	0	0	0	0	0	0	0	0
22.	TAMIL NADU	70153	2273	954	328	137	2476	6168	76321
23.	TRIPURA	113	0	0	0	1	22	23	136
24.	UTTAR PRADESH	1972140	3882	2617	1638	1809	480	10426	1982566
25.	WEST BENGAL	489162	9762	1694	1413	1411	1196	15476	504638
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0	0	0
28.	DELHI	8984	22	3	3	5	3	36	9020
29.	PONDICHERRY	3643	70	2	158	17	5	252	3895
Total :		5148644	50974	9179	11633	6520	9692	87998	5236642

MINOR IRRIGATION CENSUS (1993-94)
Table 2.7 Distribution of Tubewell according to Finance source

(in Nos.)								
Source of Finance for constructing Tubewell								
Sl. No.	Name of State/UTs.	Govt. Fund	Farmers Saving	Loan & Saving	Subsidy & Bank loan	Subsidy Only	Others	Total (3 to 8)
1	2	3	4	5	6	7	8	9
1.	ANDHRA PRADESH	210164	75204	14240	8589	7482	694	316373
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0
3.	ASSAM	99	2150	422	5443	16492	23	24629
4.	BIHAR	88880	236257	31346	59383	94174	75630	585670
5.	GOA	9	4	3	4	8	0	28
6.	GUJARAT	0	0	0	0	0	0	0
7.	HARYANA	81337	334447	69708	2599	2066	3272	493429
8.	HIMACHAL PRADESH	236	983	95	8	23	3	1348
9.	JAMMU & KASHMIR	106	645	45	219	246	52	1313
10.	KARNATAKA	8059	43487	22058	3658	844	1395	79501
11.	KERALA	186	1366	267	399	75	26	2319
12.	MADHYA PRADESH	15484	93108	7277	2902	1305	622	120698
13.	MAHARASHTRA	0	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0	0
15.	MEGHALAYA	1	108	0	0	0	0	109
16.	MIZORAM	0	0	0	0	0	0	0
17.	NAGALAND	0	0	0	0	6	0	6
18.	ORISSA	1349	5658	3933	4033	1533	6	16512
19.	PUNJAB	194418	730238	15774	1090	815	1336	943671
20.	RAJASTHAN	17525	39912	4184	1034	159	146	62960
21.	SIKKIM	0	0	0	0	0	0	0
22.	TAMIL NADU	48616	23426	2896	163	673	470	76244
23.	TRIPURA	53	26	2	27	20	0	128
24.	UTTAR PRADESH	95004	988372	293120	580439	16968	7712	1981615
25.	WEST BENGAL	29876	389656	36386	24298	10183	6093	496492
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0	0
28.	DELHI	32	8965	20	1	1	1	9020
29.	PONDICHERRY	102	3364	270	102	1	7	3846
Total :		791536	2977376	502046	694391	153074	97488	5215911

Table 2.8 Tubewell according to water distribution system

Table 2.8

Tubewell according to water distribution system

MINOR IRRIGATION CENSUS (1993-94)

(in Nos.)

According to Water Distribution System							
Sl. No.	Name of State/UTs.	Sprinkler	Drip Irri.	Open Channel	Under gr. Channel	Others	Total (3 to 7)
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	4294	1447	248669	53285	9502	317197
2.	ARUNACHAL PRADESH	0	0	0	0	0	0
3.	ASSAM	7	24	26491	6	544	27072
4.	BIHAR	3943	4428	557721	2948	20479	589519
5.	GOA	1	1	14	10	2	28
6.	GUJARAT	0	0	0	0	0	0
7.	HARYANA	25503	3367	438055	22074	5295	494294
8.	HIMACHAL PRADESH	10	34	1513	61	6	1624
9.	JAMMU & KASHMIR	0	0	1313	0	0	1313
10.	KARNATAKA	2995	906	46874	21146	7675	79596
11.	KERALA	7	22	365	610	1360	2364
12.	MADHYA PRADESH	7609	836	57391	46407	9261	121504
13.	MAHARASHTRA	0	0	0	0	0	0
14.	MANIPUR	0	0	36	0	0	36
15.	MEGHALAYA	0	0	110	0	0	110
16.	MIZORAM	0	0	0	0	0	0
17.	NAGALAND	0	0	0	0	6	6
18.	ORISSA	69	28	16588	355	1055	18095
19.	PUNJAB	6338	7741	927408	2071	651	944209
20.	RAJASTHAN	3189	844	51752	851	6463	63099
21.	SIKKIM	0	0	0	0	0	0
22.	TAMIL NADU	2996	1039	66996	1398	3892	76321
23.	TRIPURA	3	1	130	2	0	136
24.	UTTAR PRADESH	16544	25275	1898841	11341	30565	1982566
25.	WEST BENGAL	7454	4306	481946	3622	7310	504638
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0
28.	DELHI	23	41	8670	284	2	9020
29.	PONDICHERRY	3	1489	2178	180	45	3895
Total :		80988	51829	4833061	166651	104113	5236642

Table 2.9 Distribution of Tubewell according to water lifting device

MINOR IRRIGATION CENSUS (1993-94)								
(in Nos.)								
According to Water Lifting Devices for Tubewell								
Sl. No.	Name of State/UTs.	Electric Pumps	Diesel Pumps	Wind Mills	Solar Pumps	Man/Ani. operated	Others	Total (3 to 8)
1	2	3	4	5	6	7	8	9
1.	ANDHRA PRADESH	296234	18270	151	133	1283	1126	317197
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0
3.	ASSAM	410	26657	1	1	2	1	27072
4.	BIHAR	35415	547404	1719	313	3303	1365	589519
5.	GOA	26	1	0	0	0	1	28
6.	GUJARAT	0	0	0	0	0	0	0
7.	HARYANA	341437	148206	1631	191	1024	1805	494294
8.	HIMACHAL PRADESH	945	661	3	0	6	9	1624
9.	JAMMU & KASHMIR	1164	149	0	0	0	0	1313
10.	KARNATAKA	77271	562	199	95	413	1056	79596
11.	KERALA	2037	254	2	2	57	12	2364
12.	MADHYA PRADESH	117830	2036	127	47	838	626	121504
13.	MAHARASHTRA	0	0	0	0	0	0	0
14.	MANIPUR	0	23	0	0	0	13	36
15.	MEGHALAYA	0	80	0	0	1	29	110
16.	MIZORAM	0	0	0	0	0	0	0
17.	NAGALAND	2	4	0	0	0	0	6
18.	ORISSA	9164	8035	32	11	813	40	18095
19.	PUNJAB	580207	353396	5034	583	1918	3071	944209
20.	RAJASTHAN	13600	48081	90	16	159	1153	63099
21.	SIKKIM	0	0	0	0	0	0	0
22.	TAMIL NADU	55622	17919	165	99	1477	1039	76321
23.	TRIPURA	52	1	0	0	79	4	136
24.	UTTAR PRADESH	306978	1624923	7624	33299	2082	7660	1982566
25.	WEST BENGAL	63254	431553	1423	89	5461	2858	504638
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0	0
28.	DELHI	8245	754	4	3	11	3	9020
29.	PONDICHERRY	3754	55	0	0	1	85	3895
Total :		1913647	3229024	18205	34882	18928	21956	5236642

Table 2.10 MINOR IRRIGATION CENSUS (1993-94)
Distribution of Tubewell according to horse power

(in Nos.)									
According to horse power of lifting devices									
Sl. No.	Name of State/UTs.	0-2 hp	2-4 hp	4-6 hp	6-8 hp	8-10 hp	Above 10 hp	Unspecified hp = 0	Total (3 to 9)
1	2	3	4	5	6	7	8	9	10
1.	ANDHRA PRADESH	1285	40244	243683	20048	8297	2357	1283	317197
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0
3.	ASSAM	9	346	26607	49	9	50	2	27072
4.	BIHAR	6772	23400	500724	49033	5235	1232	3123	589519
5.	GOA	7	15	3	2	1	0	0	28
6.	GUJARAT	0	0	0	0	0	0	0	0
7.	HARYANA	5478	7765	137686	241959	77847	22535	1024	494294
8.	HIMACHAL PRADESH	39	168	460	605	191	155	6	1624
9.	JAMMU & KASHMIR	2	120	256	261	0	662	12	1313
10.	KARNATAKA	1885	9180	54563	10027	3096	432	413	79596
11.	KERALA	1904	224	123	22	12	22	57	2364
12.	MADHYA PRADESH	1326	21304	88095	5728	3615	599	837	121504
13.	MAHARASHTRA	0	0	0	0	0	0	0	0
14.	MANIPUR	36	0	0	0	0	0	0	36
15.	MEGHALAYA	0	0	0	0	109	0	1	110
16.	MIZORAM	0	0	0	0	0	0	0	0
17.	NAGALAND	0	1	5	0	0	0	0	6
18.	ORISSA	1741	4673	9491	751	478	148	813	18095
19.	PUNJAB	12788	192461	414183	275237	22065	25557	1918	944209
20.	RAJASTHAN	3256	160	14774	40044	3261	1446	158	63099
21.	SIKKIM	0	0	0	0	0	0	0	0
22.	TAMIL NADU	1184	3330	37433	19837	4623	8335	1579	76321
23.	TRIPURA	2	24	29	0	2	0	79	136
24.	UTTAR PRADESH	11057	14289	228265	1286966	401451	38679	1859	1982566
25.	WEST BENGAL	678	11370	472472	11745	2915	0	5458	504638
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0	0	0
28.	DELHI	16	3894	4386	576	89	48	11	9020
29.	PONDICHERRY	1	0	948	1218	837	890	1	3895
Total :		49466	332968	2234186	1964108	534133	103147	18634	5236642

MINOR IRRIGATION CENSUS (1993-94)
Table 2.11 Tubewell in the command of Major/Medium projects and average pumping hours

(in Nos.)											
Sl. No.	Name of State/UTs.	Location of Tubewell			According to Average Pumping Hours during peak season						
		On the Maj/Med	Outside Command	Total (3 + 4)	0-4 hrs	4-8 hrs	8-12 hrs	12-16 hrs	16-20 hrs	20-24 hrs	Total (6 to 11)
1	2	3	4	5	6	7	8	9	10	11	12
1.	ANDHRA PRADESH	54689	262508	317197	60836	152027	80789	15124	5792	2629	317197
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0	0	0
3.	ASSAM	0	27072	27072	15412	11281	378	1	0	0	27072
4.	BIHAR	42591	546928	589519	96731	443257	43497	4140	1212	682	589519
5.	GOA	0	28	28	19	7	2	0	0	0	28
6.	GUJARAT	0	0	0	0	0	0	0	0	0	0
7.	HARYANA	110542	383752	494294	61433	286095	122079	10172	4215	10300	494294
8.	HIMACHAL PRADESH	63	1561	1624	362	704	474	61	23	0	1624
9.	JAMMU & KASHMIR	34	1279	1313	945	368	0	0	0	0	1313
10.	KARNATAKA	10170	69426	79596	20311	46467	9720	1464	901	733	79596
11.	KERALA	118	2246	2364	1897	373	62	26	4	2	2364
12.	MADHYA PRADESH	3784	117720	121504	9237	46242	36980	22642	6100	303	121504
13.	MAHARASHTRA	0	0	0	0	0	0	0	0	0	0
14.	MANIPUR	0	36	36	0	36	0	0	0	0	36
15.	MEGHALAYA	97	13	110	45	65	0	0	0	0	110
16.	MIZORAM	0	0	0	0	0	0	0	0	0	0
17.	NAGALAND	0	6	6	0	6	0	0	0	0	6
18.	ORISSA	2911	15184	18095	7681	7845	2045	407	100	17	18095
19.	PUNJAB	426825	517384	944209	52234	426568	447421	10714	3296	3976	944209
20.	RAJASTHAN	1257	61842	63099	14650	36759	10869	471	144	206	63099
21.	SIKKIM	0	0	0	0	0	0	0	0	0	0
22.	TAMIL NADU	40861	35460	76321	14744	32376	17570	7764	3100	767	76321
23.	TRIPURA	0	136	136	98	31	1	0	0	6	136
24.	UTTAR PRADESH	301096	1681470	1982566	323742	1237276	369348	39685	10494	2021	1982566
25.	WEST BENGAL	55042	449596	504638	85452	185314	152220	56949	24703	0	504638
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0	0	0	0	0
28.	DELHI	152	8868	9020	907	4781	3193	125	13	1	9020
29.	PONDICHERRY	1	3894	3895	236	1583	925	298	311	542	3895
Total :		1050233	4186409	5236642	766972	2919461	1297573	170043	60408	22185	5236642

MINOR IRRIGATION CENSUS (1993-94)

Table 2.12 Average length of Water Conveyance Channel

(in meters)						
Sl. No.	Name of State/UTs.	Total Number of T'wells	Average length of channels			
			Pucca Channel	Kuccha Channel	Under gr. Channel	Total (4+5+6)
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	317197	4	64	24	92
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	27072	1	73	0	74
4.	BIHAR	589519	2	112	2	116
5.	GOA	28	25	31	54	110
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	494294	18	151	6	175
8.	HIMACHAL PRADESH	1624	80	160	81	321
9.	JAMMU & KASHMIR	1313	46	168	0	214
10.	KARNATAKA	79596	43	46	34	123
11.	KERALA	2364	39	116	86	241
12.	MADHYA PRADESH	121504	5	65	42	112
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	36	2	19	0	21
15.	MEGHALAYA	110	0	263	0	263
16.	MIZORAM	0	0	0	0	0
17.	NAGALAND	6	20	2	0	22
18.	ORISSA	18095	16	63	13	92
19.	PUNJAB	944209	7	257	5	269
20.	RAJASTHAN	63099	30	116	27	173
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	76321	19	33	5	57
23.	TRIPURA	136	4	144	2	150
24.	UTTAR PRADESH	1982566	4	107	1	112
25.	WEST BENGAL	504638	2	119	2	123
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0
28.	DELHI	9020	10	160	3	173
29.	PONDICHERRY	3895	43	191	9	243
Total :		5236642	420	2460	396	3276

Table 2.13 Culturable Command Area and Potential Created

MINOR IRRIGATION CENSUS (1993-94)							
(in Ha.)							
Sl. No.	Name of State/UTs.	Culturable Command Area	Irrigation Potential Created				Total
			Kharif	Rabi	Perennial	Others	
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	532443	379221	280491	72829	16154	748695
2.	ARUNACHAL PRADESH	0	0	0	0	0	0
3.	ASSAM	59314	52275	36056	123	2659	91113
4.	BIHAR	1853817	948008	1332318	111423	173373	2565122
5.	GOA	51	0	5	45	2	52
6.	GUJARAT	0	0	0	0	0	0
7.	HARYANA	1333977	1055035	1055038	0	0	2110073
8.	HIMACHAL PRADESH	4905	2508	4555	77	29	7169
9.	JAMMU & KASHMIR	1563	1600	1526	0	0	3126
10.	KARNATAKA	153319	112698	53813	37968	13699	218178
11.	KERALA	2534	411	333	881	1339	2964
12.	MADHYA PRADESH	544517	115037	509245	15571	5106	644959
13.	MAHARASHTRA	0	0	0	0	0	0
14.	MANIPUR	308	0	308	0	0	308
15.	MEGHALAYA	285	153	226	5	0	384
16.	MIZORAM	0	0	0	0	0	0
17.	NAGALAND	22	13	13	0	0	26
18.	ORISSA	71053	52761	69219	4645	4625	131250
19.	PUNJAB	3535501	3270578	3372497	122111	82631	6847817
20.	RAJASTHAN	273532	3587	277113	202	430	281332
21.	SIKKIM	0	0	0	0	0	0
22.	TAMIL NADU	148320	105329	64412	19256	13518	202515
23.	TRIPURA	506	357	212	4	16	589
24.	UTTAR PRADESH	7692769	3793641	4816958	1329017	616806	10556422
25.	WEST BENGAL	1015476	648432	476087	33361	385706	1543586
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0
28.	DELHI	24639	19310	24759	57	38	44164
29.	PONDICHERRY	5863	3757	2697	1500	560	8514
Total :		17254714	10564711	12377881	1749075	1316691	26008358

MINOR IRRIGATION CENSUS (1993-94)

Table 2.14 Irrigation Potential Utilised

(in Ha.)						
Sl. No.	Name of State/UTs.	Actual Area Irrigated during 1993-94				
		Khariif	Rabi	Perennial	Others	Total
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	313907	218410	71387	14274	617978
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	26423	14890	33	894	42240
4.	BIHAR	672961	1057623	80881	67410	1878875
5.	GOA	0	1	33	2	36
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	997149	997158	0	0	1994307
8.	HIMACHAL PRADESH	2049	4205	65	27	6346
9.	JAMMU & KASHMIR	1557	1493	0	0	3050
10.	KARNATAKA	94494	42766	30350	11103	178713
11.	KERALA	400	298	857	1293	2848
12.	MADHYA PRADESH	39270	451889	2110	4277	497546
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	0	195	0	0	195
15.	MEGHALAYA	59	16	4	0	79
16.	MIZORAM	0	0	0	0	0
17.	NAGALAND	9	6	0	0	15
18.	ORISSA	17013	30747	6276	167	54203
19.	PUNJAB	3055714	3094365	119717	65492	6335288
20.	RAJASTHAN	3139	271110	548	287	275084
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	85399	50819	15736	7664	159618
23.	TRIPURA	266	115	3	15	399
24.	UTTAR PRADESH	3190443	4051540	1004591	405534	8652108
25.	WEST BENGAL	410082	411361	26245	331978	1179666
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0
28.	DELHI	18332	24411	67	4	42814
29.	PONDICHERRY	3501	2538	1415	468	7922
Total :		8932167	10725956	1360318	910889	21929330

MINOR IRRIGATION CENSUS (1993-94)

Table 2.15 Irrigation through supplementary sources

(in Ha.)						
Sl. No.	Name of State/UTs.	Supplementary Irrigation in 1993-94				
		Khharif	Rabi	Perenial	Others	Total
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	42378	18344	6502	1460	68684
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	0	0	0	0	0
4.	BIHAR	48050	43189	3543	2202	96984
5.	GOA	0	0	0	0	0
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	129606	135248	0	0	264854
8.	HIMACHAL PRADESH	7	7	0	0	14
9.	JAMMU & KASHMIR	11	10	0	0	21
10.	KARNATAKA	5911	2058	2257	1440	11666
11.	KERALA	65	91	16	30	202
12.	MADHYA PRADESH	4745	2783	63	19	7610
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0
15.	MEGHALAYA	5	0	4	0	9
16.	MIZORAM	0	0	0	0	0
17.	NAGALAND	0	0	0	0	0
18.	ORISSA	2650	1272	780	5	4707
19.	PUNJAB	844027	850528	19819	16150	1730524
20.	RAJASTHAN	162	680	0	0	842
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	31590	23454	5697	1348	62089
23.	TRIPURA	0	0	0	0	0
24.	UTTAR PRADESH	500622	273322	69815	22990	866749
25.	WEST BENGAL	17225	12862	1878	8491	40456
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0
28.	DELHI	0	0	0	0	0
29.	PONDICHERY	0	0	0	0	0
Total :		9033696	10799558	1401353	924461	25084741

MINOR IRRIGATION CENSUS (1993-94)

Table 2.16 Tubewell according to the constraints

(In No.)

Sl. No.	Name of State/UTs.	No. of Tubewell in use	No. of Tubewell with no cons'ts	Constraints in utilisation of Irri. Pot. Created					Grand Total (4 + 9)
				Inadequate Powers	Mechanical Break down	Less Water Discharge	Other Reason	Total (5 to 8)	
1	2	3	4	5	6	7	8	9	10
1.	ANDHRA PRADESH	304358	175431	37088	3675	68204	19960	128927	304358
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0
3.	ASSAM	20158	0	347	2170	6696	10945	20158	20158
4.	BIHAR	575252	7953	61607	92978	51946	360768	567299	575252
5.	GOA	26	0	0	0	13	13	26	26
6.	GUJARAT	0	0	0	0	0	0	0	0
7.	HARYANA	492159	0	79695	16707	6178	389579	492159	492159
8.	HIMACHAL PRADESH	1604	1222	34	13	137	198	382	1604
9.	JAMMU & KASHMIR	1302	0	0	0	0	11	11	11
10.	KARNATAKA	75469	34129	26302	1360	11595	2083	41340	75469
11.	KERALA	2344	0	194	7	180	1963	2344	2344
12.	MADHYA PRADESH	119243	46108	1781	433	24904	46017	73135	119243
13.	MAHARASHTRA	0	0	0	0	0	0	0	0
14.	MANIPUR	36	0	0	0	0	36	36	36
15.	MEGHALAYA	110	0	98	1	1	10	110	110
16.	MIZORAM	0	0	0	0	0	0	0	0
17.	NAGALAND	6	0	0	0	0	6	6	6
18.	ORISSA	15284	1596	1529	816	1232	10111	13688	15284
19.	PUNJAB	938503	0	607470	20129	4337	306567	938503	938503
20.	RAJASTHAN	58595	54317	303	11	3925	39	4278	58595
21.	SIKKIM	0	0	0	0	0	0	0	0
22.	TAMIL NADU	70153	7345	14717	382	2158	45551	62808	70153
23.	TRIPURA	113	75	34	2	2	0	38	113
24.	UTTAR PRADESH	1972140	222701	388779	156356	64512	1139792	1749439	1972140
25.	WEST BENGAL	489162	0	38249	27569	45066	378278	489162	489162
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0	0	0
28.	DELHI	8984	6696	1437	201	118	532	2288	8984
29.	PONDICHERRY	3643	3455	0	0	60	128	188	3643
Total :		5148644	561028	1259664	322810	291264	2712587	4586325	5147353

III. DEEP TUBEWELLS

MINOR IRRIGATION CENSUS (1993-94)

Table 3.1 Construction of Deep Tubewells over the year

(in Nos.)

Construction of Deep Tubewells over the years										
Sl. No.	Name of State/UTs.	Upto 1986-87	During 1987-88	During 1988-89	During 1989-90	During 1990-91	During 1991-92	During 1992-93	During 1993-94	Total (3 to 10)
1	2	3	4	5	6	7	8	9	10	11
1.	ANDHRA PRADESH	9135	2130	2948	3761	3470	3767	3069	2936	31216
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0	0
3.	ASSAM	398	38	27	13	19	54	25	18	592
4.	BIHAR	4493	288	297	254	176	163	352	417	6440
5.	GOA	1	0	8	7	0	2	1	0	19
6.	GUJARAT	0	0	0	0	0	0	0	0	0
7.	HARYANA	2389	1371	712	639	454	372	299	178	6414
8.	HIMACHAL PRADESH	166	25	9	5	7	10	2	6	230
9.	JAMMU & KASHMIR	83	5	2	0	3	0	4	0	97
10.	KARNATAKA	25538	12293	14016	18634	21339	20540	16183	22039	150582
11.	KERALA	29	19	49	14	34	12	25	16	198
12.	MADHYA PRADESH	7859	1962	1934	1571	3445	2681	2581	2418	24451
13.	MAHARASHTRA	0	0	0	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0	0	0	0
15.	MEGHALAYA	3	0	0	0	0	0	0	4	7
16.	MIZORAM	0	0	0	0	0	0	0	0	0
17.	NAGALAND	0	0	2	0	0	0	1	0	3
18.	ORISSA	2344	155	73	71	89	66	57	56	2911
19.	PUNJAB	720	198	254	368	287	134	153	163	2277
20.	RAJASTHAN	1919	601	1094	923	1581	1822	2284	2326	12550
21.	SIKKIM	0	0	0	0	0	0	0	0	0
22.	TAMIL NADU	14582	2752	2684	3209	2844	2306	1288	3301	32966
23.	TRIPURA	65	8	6	4	12	13	10	13	131
24.	UTTAR PRADESH	8169	681	614	807	495	263	231	365	11625
25.	WEST BENGAL	2787	125	82	80	122	195	241	407	4039
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0	0	0	0
28.	DELHI	157	80	65	50	116	91	78	54	691
29.	PONDICHERRY	170	16	29	47	49	39	31	37	418
Total :		81007	22747	24905	30457	34542	32530	26915	34754	287857

MINOR IRRIGATION CENSUS (1993-94)

Table 3.2 Distribution according to ownership

(in Nos.)

Sl. No.	Name of State/UTs.	Tubewells Owned by						Total (3 to 8)
		Govt. Owned	Coop. Societies	Panchayat Owned	Group of farmers	Individual farmers	Others	
1	2	3	4	5	6	7	8	9
1.	ANDHRA PRADESH	736	39	9	2197	0	28235	31216
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0
3.	ASSAM	591	0	0	0	0	1	592
4.	BIHAR	3713	18	19	133	0	2557	6440
5.	GOA	15	0	0	1	0	3	19
6.	GUJARAT	0	0	0	0	0	0	0
7.	HARYANA	99	33	175	4069	0	2038	6414
8.	HIMACHAL PRADESH	204	0	0	15	0	11	230
9.	JAMMU & KASHMIR	60	0	0	16	13	8	97
10.	KARNATAKA	342	241	148	52668	86926	10257	150582
11.	KERALA	7	2	7	26	0	156	198
12.	MADHYA PRADESH	853	68	113	5080	81	18256	24451
13.	MAHARASHTRA	0	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0	0
15.	MEGHALAYA	7	0	0	0	0	0	7
16.	MIZORAM	0	0	0	0	0	0	0
17.	NAGALAND	0	0	0	0	0	3	3
18.	ORISSA	2803	3	0	12	0	93	2911
19.	PUNJAB	146	18	2	1245	0	866	2277
20.	RAJASTHAN	118	18	9	6968	21	5416	12550
21.	SIKKIM	0	0	0	0	0	0	0
22.	TAMIL NADU	91	10	25	16159	0	16681	32966
23.	TRIPURA	129	1	1	0	0	0	131
24.	UTTAR PRADESH	8006	57	281	316	0	2965	11625
25.	WEST BENGAL	3954	0	5	1	0	79	4039
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0	0
28.	DELHI	0	1	0	191	0	499	691
29.	PONDICHERY	1	0	0	3	0	414	418
Total :		21875	509	794	89100	87041	88538	287857

MINOR IRRIGATION CENSUS (1993-94)
Table 3.3 Distribution of Tubewells according to the holding size

(in Nos.)						
According to Farmers' Holding size						
Sl. No.	Name of State/UTs.	Marginal (0-1 ha)	Small (1-2 ha)	Medium (2-10 ha)	Big (>10 ha)	Total (3 to 6)
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	271	709	1085	132	2197
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	0	0	0	0	0
4.	BIHAR	45	15	48	25	133
5.	GOA	0	0	1	0	1
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	141	456	3133	339	4069
8.	HIMACHAL PRADESH	0	0	0	15	15
9.	JAMMU & KASHMIR	23	31	28	15	97
10.	KARNATAKA	28619	49849	54652	6474	139594
11.	KERALA	3	1	7	15	26
12.	MADHYA PRADESH	321	509	2445	1886	5161
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0
15.	MEGHALAYA	0	0	0	0	0
16.	MIZORAM	0	0	0	0	0
17.	NAGALAND	0	0	0	0	0
18.	ORISSA	0	4	1	7	12
19.	PUNJAB	31	195	730	289	1245
20.	RAJASTHAN	193	383	4600	1813	6989
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	6504	4890	4178	587	16159
23.	TRIPURA	0	0	0	0	0
24.	UTTAR PRADESH	49	24	126	117	316
25.	WEST BENGAL	0	0	0	1	1
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0
28.	DELHI	93	92	6	0	191
29.	PONDICHERRY	0	0	3	0	3
Total :		36293	57158	71043	11715	176209

MINOR IRRIGATION CENSUS (1993-94)

Table 3.4 Distribution of Tubewells according to social status

(in Nos.)							
Sl. No.	Name of State/UTs.	According to Social Status of farmers				Owned by other than ind./group of farmers	Grand Total (6 + 7)
		Schedule Caste	Schedule Tribe	Others	Total (3+4+5)		
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	266	23	1908	2197	784	2981
2.	ARUNACHAL PRADESH	0	0	0	0	0	0
3.	ASSAM	0	0	0	0	591	591
4.	BIHAR	34	0	99	133	3750	3883
5.	GOA	0	0	1	1	15	16
6.	GUJARAT	0	0	0	0	0	0
7.	HARYANA	66	50	3953	4069	307	4376
8.	HIMACHAL PRADESH	0	0	15	15	204	219
9.	JAMMU & KASHMIR	5	0	24	29	73	102
10.	KARNATAKA	8162	6130	125302	139594	87657	227251
11.	KERALA	4	2	20	26	16	42
12.	MADHYA PRADESH	395	399	4367	5161	1115	6276
13.	MAHARASHTRA	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0
15.	MEGHALAYA	0	0	0	0	7	7
16.	MIZORAM	0	0	0	0	0	0
17.	NAGALAND	0	0	0	0	0	0
18.	ORISSA	0	0	12	12	2806	2818
19.	PUNJAB	25	3	1217	1245	166	1411
20.	RAJASTHAN	545	139	6305	6989	166	7155
21.	SIKKIM	0	0	0	0	0	0
22.	TAMIL NADU	953	289	14917	16159	126	16285
23.	TRIPURA	0	0	0	0	131	131
24.	UTTAR PRADESH	18	2	296	316	8344	8660
25.	WEST BENGAL	0	0	1	1	3959	3960
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0
28.	DELHI	0	0	191	191	1	192
29.	PONDICHERRY	0	0	3	3	1	4
Total :		10473	7037	158631	176141	110219	286360

MINOR IRRIGATION CENSUS(1993-94)

Table 3.5 Distribution of Tubewells by its status

(in Nos.)								
Sl. No.	Name of State/UTs.	T'wells In Use	Temporary	Tubewells Not in Use Dried up	Destroyed	Others	Total (4 to 7)	Grand Total (3 + 8)
1	2	3	4	5	6	7	8	9
1.	ANDHRA PRADESH	29839	992	200	147	38	1377	31216
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0
3.	ASSAM	387	190	2	7	6	205	592
4.	BIHAR	4398	1111	228	367	336	2042	6440
5.	GOA	12	7	0	0	0	7	19
6.	GUJARAT	0	0	0	0	0	0	0
7.	HARYANA	6377	22	0	1	14	37	6414
8.	HIMACHAL PRADESH	229	0	0	0	1	1	230
9.	JAMMU & KASHMIR	97	0	0	0	0	0	97
10.	KARNATAKA	144393	2065	1392	2130	602	6189	150582
11.	KERALA	193	1	4	0	0	5	198
12.	MADHYA PRADESH	23014	336	188	61	852	1437	24451
13.	MAHARASHTRA	0	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0	0
15.	MEGHALAYA	6	0	0	0	1	1	7
16.	MIZORAM	0	0	0	0	0	0	0
17.	NAGALAND	2	1	0	0	0	1	3
18.	ORISSA	1866	618	117	197	113	1045	2911
19.	PUNJAB	2233	24	17	1	2	44	2277
20.	RAJASTHAN	11726	677	79	18	50	824	12550
21.	SIKKIM	0	0	0	0	0	0	0
22.	TAMIL NADU	29249	1385	763	931	638	3717	32966
23.	TRIPURA	119	3	6	1	2	12	131
24.	UTTAR PRADESH	11052	161	50	43	319	573	11625
25.	WEST BENGAL	3509	411	34	27	58	530	4039
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0	0
28.	DELHI	686	3	0	1	1	5	691
29.	PONDICHERRY	412	4	1	1	0	6	418
Total :		269799	8011	3081	3933	3033	18058	287857

MINOR IRRIGATION CENSUS (1993-94)

Table 3.6 Distribution of Tubewells according to Finance source

(in Nos.)							
Source of Finance for constructing Tubewells							
Sl. No.	Name of State/UTs.	Govt. Funds	Farmers Saving	Loan & Saving	Subsidy & Bank loan	Others	Total (3 to 7)
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	5712	20244	3637	576	311	30480
2.	ARUNACHAL PRADESH	0	0	0	0	0	0
3.	ASSAM	0	0	0	0	1	1
4.	BIHAR	434	471	199	562	1061	2727
5.	GOA	1	1	0	2	0	4
6.	GUJARAT	0	0	0	0	0	0
7.	HARYANA	901	3420	1765	27	202	6315
8.	HIMACHAL PRADESH	5	12	2	1	6	26
9.	JAMMU & KASHMIR	83	14	0	0	0	97
10.	KARNATAKA	13521	88470	35847	4406	7996	150240
11.	KERALA	35	46	68	41	1	191
12.	MADHYA PRADESH	7460	12454	1547	768	1369	23598
13.	MAHARASHTRA	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0
15.	MEGHALAYA	0	0	0	0	0	0
16.	MIZORAM	0	0	0	0	0	0
17.	NAGALAND	2	0	0	0	1	3
18.	ORISSA	23	27	25	25	8	108
19.	PUNJAB	425	1633	27	8	38	2131
20.	RAJASTHAN	1165	9856	1190	100	121	12432
21.	SIKKIM	0	0	0	0	0	0
22.	TAMIL NADU	20892	9331	882	188	1582	32875
23.	TRIPURA	2	0	0	0	0	2
24.	UTTAR PRADESH	2009	861	364	265	120	3619
25.	WEST BENGAL	9	9	2	0	65	85
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0
28.	DELHI	4	677	7	1	2	691
29.	PONDICHERRY	0	238	84	11	84	417
Total :		52683	147764	45646	6981	12968	266042

Table 3.7 Tubewells according to water distribution system

MINOR IRRIGATION CENSUS (1993-94)

(in Nos.)							
According to Water Distribution System							
Sl. No.	Name of State/UTs.	Sprinkler	Drip Irri.	Open Channel	Under gr. Channel	Others	Total (3 to 7)
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	210	160	27692	2113	1041	31216
2.	ARUNACHAL PRADESH	0	0	0	0	0	0
3.	ASSAM	2	0	289	288	13	592
4.	BIHAR	603	58	4849	726	204	6440
5.	GOA	4	0	14	0	1	19
6.	GUJARAT	0	0	0	0	0	0
7.	HARYANA	133	24	5862	391	4	6414
8.	HIMACHAL PRADESH	12	1	79	138	0	230
9.	JAMMU & KASHMIR	0	0	97	0	0	97
10.	KARNATAKA	5913	1980	81988	44506	16195	150582
11.	KERALA	2	7	32	47	110	198
12.	MADHYA PRADESH	2222	206	14872	5629	1522	24451
13.	MAHARASHTRA	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0
15.	MEGHALAYA	0	0	7	0	0	7
16.	MIZORAM	0	0	0	0	0	0
17.	NAGALAND	0	0	0	0	3	3
18.	ORISSA	66	1	2247	468	129	2911
19.	PUNJAB	63	13	1832	358	11	2277
20.	RAJASTHAN	653	72	10419	1156	250	12550
21.	SIKKIM	0	0	0	0	0	0
22.	TAMIL NADU	2826	322	25954	1405	2459	32966
23.	TRIPURA	1	0	17	101	12	131
24.	UTTAR PRADESH	396	100	8208	2670	251	11625
25.	WEST BENGAL	61	57	268	3643	10	4039
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0
28.	DELHI	36	2	348	287	18	691
29.	PONDICHERY	0	0	355	46	17	418
Total :		13203	3003	185429	63972	22250	287857

Table 3.8 Distribution of Tubewells according to lifting device

MINOR IRRIGATION CENSUS (1993-94)					
(in Nos.)					
According to Water Lifting Devices					
Sl. No.	Name of State/UTs.	Submersible Pumps	Turbine Pumps	Others	Total (3+4+5)
1	2	3	4	5	6
1.	ANDHRA PRADESH	30952	233	31	31216
2.	ARUNACHAL PRADESH	0	0	0	0
3.	ASSAM	474	62	56	592
4.	BIHAR	3254	1549	1637	6440
5.	GOA	16	0	3	19
6.	GUJARAT	0	0	0	0
7.	HARYANA	5727	621	66	6414
8.	HIMACHAL PRADESH	196	13	21	230
9.	JAMMU & KASHMIR	83	14	0	97
10.	KARNATAKA	142904	1513	6165	150582
11.	KERALA	78	15	105	198
12.	MADHYA PRADESH	22698	649	1104	24451
13.	MAHARASHTRA	0	0	0	0
14.	MANIPUR	0	0	0	0
15.	MEGHALAYA	3	1	3	7
16.	MIZORAM	0	0	0	0
17.	NAGALAND	2	0	1	3
18.	ORISSA	2711	73	127	2911
19.	PUNJAB	1687	269	321	2277
20.	RAJASTHAN	11956	495	99	12550
21.	SIKKIM	0	0	0	0
22.	TAMIL NADU	23246	4813	4907	32966
23.	TRIPURA	119	10	2	131
24.	UTTAR PRADESH	8621	2136	868	11625
25.	WEST BENGAL	3311	638	90	4039
26.	ANDAMAN & NICOBARS	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0
28.	DELHI	691	0	0	691
29.	PONDICHERRY	415	0	3	418
Total :		259144	13104	15609	287857

MINOR IRRIGATION CENSUS (1993-94)

Table 3.9 Distribution of Tubewells according to horse power

(in Nos.)						
Sl. No.	Name of State/UTs.	According to horse power of lifting devices				
		0-6 hp	6-12 hp	12-18 hp	Above 18 hp	Total (3 to 6)
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	8709	16638	4822	1047	31216
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	5	10	47	530	592
4.	BIHAR	2628	545	1806	1461	6440
5.	GOA	18	0	1	0	19
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	1614	2187	1273	1340	6414
8.	HIMACHAL PRADESH	13	46	23	148	230
9.	JAMMU & KASHMIR	44	53	0	0	97
10.	KARNATAKA	116379	33908	113	182	150582
11.	KERALA	171	24	3	0	198
12.	MADHYA PRADESH	19667	4462	179	143	24451
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0
15.	MEGHALAYA	0	4	3	0	7
16.	MIZORAM	0	0	0	0	0
17.	NAGALAND	3	0	0	0	3
18.	ORISSA	528	2123	254	6	2911
19.	PUNJAB	882	526	274	595	2277
20.	RAJASTHAN	1329	1975	2434	6812	12550
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	17499	10479	4405	583	32966
23.	TRIPURA	1	3	38	89	131
24.	UTTAR PRADESH	557	1995	4370	4703	11625
25.	WEST BENGAL	0	19	2225	1795	4039
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0
28.	DELHI	680	5	4	2	691
29.	PONDICHERRY	1	104	251	62	418
Total :		170728	75106	22525	19498	287857

MINOR IRRIGATION CENSUS (1993-94)

Table 3.10 Deep Tubewells in the Major/Medium Irri. Command

(in Nos.)					
Sl. No.	Name of State/UTs.	Location of Tubewells			
		On the Command	Outside Command	Augmen- tation	Total (3 to 5)
1	2	3	4	5	6
1.	ANDHRA PRADESH	1086	30116	14	31216
2.	ARUNACHAL PRADESH	0	0	0	0
3.	ASSAM	0	592	0	592
4.	BIHAR	790	5617	33	6440
5.	GOA	1	18	0	19
6.	GUJARAT	0	0	0	0
7.	HARYANA	648	5756	10	6414
8.	HIMACHAL PRADESH	1	229	0	230
9.	JAMMU & KASHMIR	59	38	0	97
10.	KARNATAKA	24166	125594	822	150582
11.	KERALA	9	189	0	198
12.	MADHYA PRADESH	1267	23177	7	24451
13.	MAHARASHTRA	0	0	0	0
14.	MANIPUR	0	0	0	0
15.	MEGHALAYA	3	4	0	7
16.	MIZORAM	0	0	0	0
17.	NAGALAND	0	3	0	3
18.	ORISSA	172	2736	3	2911
19.	PUNJAB	679	1503	95	2277
20.	RAJASTHAN	271	12255	24	12550
21.	SIKKIM	0	0	0	0
22.	TAMIL NADU	10009	22838	119	32966
23.	TRIPURA	3	128	0	131
24.	UTTAR PRADESH	3519	8064	42	11625
25.	WEST BENGAL	488	3551	0	4039
26.	ANDAMAN & NICOBARS	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0
28.	DELHI	3	688	0	691
29.	PONDICHERRY	0	418	0	418
Total :		43174	243514	1169	287857

MINOR IRRIGATION CENSUS (1993-94)
Table 3.11 Distribution of Tubewells according to Average Pumping Hours

(in Nos.)								
According to Average Pumping Hours during peak season								
Sl. No.	Name of State/UTs.	0-4 hrs	4-8 hrs	8-12 hrs	12-16 hrs	16-20 hrs	20-24 hrs	Total (3 to 8)
1	2	3	4	5	6	7	8	9
1.	ANDHRA PRADESH	4651	14485	7994	2644	1252	190	31216
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0
3.	ASSAM	208	358	25	1	0	0	592
4.	BIHAR	1143	3178	1787	240	71	21	6440
5.	GOA	16	3	0	0	0	0	19
6.	GUJARAT	0	0	0	0	0	0	0
7.	HARYANA	450	4372	1512	38	22	20	6414
8.	HIMACHAL PRADESH	13	65	56	50	31	15	230
9.	JAMMU & KASHMIR	9	88	0	0	0	0	97
10.	KARNATAKA	45404	81145	17783	2462	1667	2121	150582
11.	KERALA	133	46	15	3	1	0	198
12.	MADHYA PRADESH	5295	8160	6673	2530	1652	141	24451
13.	MAHARASHTRA	0	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0	0
15.	MEGHALAYA	1	5	1	0	0	0	7
16.	MIZORAM	0	0	0	0	0	0	0
17.	NAGALAND	1	2	0	0	0	0	3
18.	ORISSA	492	1285	778	225	126	5	2911
19.	PUNJAB	94	660	1310	172	36	5	2277
20.	RAJASTHAN	1201	10658	557	65	28	41	12550
21.	SIKKIM	0	0	0	0	0	0	0
22.	TAMIL NADU	8037	11558	8715	2080	1546	1030	32966
23.	TRIPURA	20	87	21	3	0	0	131
24.	UTTAR PRADESH	787	5160	4289	901	429	59	11625
25.	WEST BENGAL	94	725	2171	739	307	3	4039
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0	0
28.	DELHI	108	413	149	19	2	0	691
29.	PONDICHERY	16	89	131	10	60	112	418
Total :		68173	142542	53967	12182	7230	3763	287857

MINOR IRRIGATION CENSUS (1993-94)

Table 3.12 Average length of Water Conveyance Channel

(in Mts.)						
Sl. No.	Name of State/UTs.	Total Number of T'wells	Average length of channels			
			Pucca Channel	Kuccha Channel	Under gr. Channel	Total (4+5+6)
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	31216	7	93	38	138
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	592	128	67	719	914
4.	BIHAR	6440	298	562	431	1291
5.	GOA	19	125	437	0	562
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	6414	40	189	33	262
8.	HIMACHAL PRADESH	230	144	339	739	1222
9.	JAMMU & KASHMIR	97	260	293	0	553
10.	KARNATAKA	150582	26	54	33	113
11.	KERALA	198	24	78	255	357
12.	MADHYA PRADESH	24451	11	69	38	118
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0
15.	MEGHALAYA	7	219	168	4	391
16.	MIZORAM	0	0	0	0	0
17.	NAGALAND	3	0	0	0	0
18.	ORISSA	2911	52	122	32	206
19.	PUNJAB	2277	22	303	84	409
20.	RAJASTHAN	12550	20	197	41	258
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	32966	27	28	23	78
23.	TRIPURA	131	42	75	1381	1498
24.	UTTAR PRADESH	11625	200	163	107	470
25.	WEST BENGAL	4039	81	356	1418	1855
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0
28.	DELHI	691	24	17	77	118
29.	PONDICHERY	418	12	185	45	242
Total :		287857	1762	3795	5498	11055

MINOR IRRIGATION CENSUS (1993-94)

Table 3.13 Culturable Command Area and Potential Created

(in Ha.)							
Sl. No.	Name of State/UTs.	Culturable Command Area	Irrigation Potential Created				
			Kharif	Rabi	Perennial	Others	Total
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	100530	73865	58465	10407	5908	148645
2.	ARUNACHAL PRADESH	0	0	0	0	0	0
3.	ASSAM	19319	17200	9737	75	338	27350
4.	BIHAR	150189	98307	119408	11678	9838	239231
5.	GOA	48	0	12	33	4	49
6.	GUJARAT	0	0	0	0	0	0
7.	HARYANA	19517	19054	19251	3	1	38309
8.	HIMACHAL PRADESH	5484	3719	4742	97	31	8589
9.	JAMMU & KASHMIR	2080	2245	1747	0	0	3992
10.	KARNATAKA	275154	195002	88924	82224	30366	396516
11.	KERALA	727	175	188	467	149	979
12.	MADHYA PRADESH	97906	42981	78682	6162	992	128817
13.	MAHARASHTRA	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0
15.	MEGHALAYA	218	204	141	11	25	381
16.	MIZORAM	0	0	0	0	0	0
17.	NAGALAND	14	7	7	0	0	14
18.	ORISSA	51626	40284	37021	358	4468	82131
19.	PUNJAB	25330	20435	24079	890	520	45924
20.	RAJASTHAN	132181	18479	134523	566	2402	155970
21.	SIKKIM	0	0	0	0	0	0
22.	TAMIL NADU	59192	31546	24294	8529	4733	69102
23.	TRIPURA	3116	1745	2105	81	124	4055
24.	UTTAR PRADESH	769432	360321	501816	113406	53145	1028688
25.	WEST BENGAL	154065	121253	85521	8559	42859	258192
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0
28.	DELHI	4130	3559	3518	50	8	7135
29.	PONDICHERRY	950	444	472	468	47	1431
Total :		1871208	1050825	1194653	244064	155958	2645500

MINOR IRRIGATION CENSUS (1993-94)

Table 3.14 Irrigation Potential Utilised

(in Ha.)						
Sl. No.	Name of State/UTs.	Actual Area Irrigated during 1993-94				
		Kharif	Rabi	Perennial	Others	Total
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	60481	46125	9968	5395	121969
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	5777	2821	29	135	8762
4.	BIHAR	31269	39436	4226	2046	76977
5.	GOA	0	12	33	0	45
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	18803	18907	2	0	37712
8.	HIMACHAL PRADESH	3133	4564	60	7	7764
9.	JAMMU & KASHMIR	2333	1654	0	0	3987
10.	KARNATAKA	150639	63621	64202	19442	297904
11.	KERALA	81	92	403	132	708
12.	MADHYA PRADESH	15058	65445	1580	718	82801
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0
15.	MEGHALAYA	143	95	1	8	247
16.	MIZORAM	0	0	0	0	0
17.	NAGALAND	2	3	1	0	6
18.	ORISSA	1979	12017	117	17	14130
19.	PUNJAB	16749	18389	978	381	36497
20.	RAJASTHAN	12469	123451	375	2096	138391
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	23130	15035	6812	2968	47945
23.	TRIPURA	1345	1657	53	89	3144
24.	UTTAR PRADESH	259872	392973	78740	24747	756332
25.	WEST BENGAL	51995	43838	5051	29534	130418
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0
28.	DELHI	3291	3340	31	6	6668
29.	PONDICHERY	436	471	461	45	1413
Total :		658985	853946	173123	87766	1773820

MINOR IRRIGATION CENSUS (1993-94)

Table 3.15 Irrigation through supplementary sources

(in Ha.)						
Sl. No.	Name of State/UTs.	Supplementary Irrigation in 1993-94				
		Kharrif	Rabi	Perennial	Others	Total
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	825	288	267	0	1380
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	0	0	0	0	0
4.	BIHAR	1156	1034	104	51	2345
5.	GOA	0	1	18	0	19
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	1394	1414	0	0	2808
8.	HIMACHAL PRADESH	0	0	0	0	0
9.	JAMMU & KASHMIR	8	8	0	0	16
10.	KARNATAKA	12698	9457	4494	2066	28715
11.	KERALA	0	4	0	0	4
12.	MADHYA PRADESH	255	723	7	8	993
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0
15.	MEGHALAYA	3	0	1	0	4
16.	MIZORAM	0	0	0	0	0
17.	NAGALAND	0	0	0	0	0
18.	ORISSA	345	42	7	2	396
19.	PUNJAB	1135	1138	7	0	2280
20.	RAJASTHAN	48	77	0	0	125
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	6541	4071	932	286	11830
23.	TRIPURA	0	0	0	0	0
24.	UTTAR PRADESH	15929	31993	5878	2090	55890
25.	WEST BENGAL	815	220	17	285	1337
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0
28.	DELHI	0	0	0	0	0
29.	PONDICHERRY	0	0	0	0	0
Total :		41152	50470	11732	4788	108142

MINOR IRRIGATION CENSUS (1993-94)

Table 3.16 Tubewells according to the constraints

(in Nos.)									
Sl. No.	Name of State/UTs.	Total No. of T'wells in use	No. of T'wells with no cons'ts	Constraints in utilisation of Irri. Pot. Created					Grand Total (4 + 9)
				Inadequate Powers	Mechanical Break down	Less Water Discharge	Other Reason	Total (5 to 8)	
1	2	3	4	5	6	7	8	9	10
1.	ANDHRA PRADESH	29839	16596	3732	466	8020	1025	13243	29839
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0
3.	ASSAM	387	0	67	33	10	277	387	387
4.	BIHAR	4398	33	1171	777	156	2261	4365	4398
5.	GOA	12	0	0	0	7	5	12	12
6.	GUJARAT	0	0	0	0	0	0	0	0
7.	HARYANA	6377	0	1848	15	35	4479	6377	6377
8.	HIMACHAL PRADESH	229	153	5	3	32	36	76	229
9.	JAMMU & KASHMIR	97	0	0	0	0	3	3	3
10.	KARNATAKA	144393	60819	59670	2226	15311	6367	83574	144393
11.	KERALA	193	0	8	6	16	163	193	193
12.	MADHYA PRADESH	23014	9585	286	73	2490	10580	13429	23014
13.	MAHARASHTRA	0	0	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0	0	0
15.	MEGHALAYA	6	0	0	0	2	4	6	6
16.	MIZORAM	0	0	0	0	0	0	0	0
17.	NAGALAND	2	0	0	0	0	2	2	2
18.	ORISSA	1866	13	589	157	241	866	1853	1866
19.	PUNJAB	2233	0	1404	41	11	777	2233	2233
20.	RAJASTHAN	11726	6318	2704	24	2308	372	5408	11726
21.	SIKKIM	0	0	0	0	0	0	0	0
22.	TAMIL NADU	29249	788	1596	421	3655	22789	28461	29249
23.	TRIPURA	119	21	30	14	11	43	98	119
24.	UTTAR PRADESH	11052	776	4164	473	324	5315	10276	11052
25.	WEST BENGAL	3509	0	638	167	387	2317	3509	3509
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0	0	0	0
28.	DELHI	686	605	15	1	2	63	81	686
29.	PONDICHERRY	412	412	0	0	0	0	0	412
Total :		269799	96119	77927	4897	33018	57744	173586	269705

IV. SURFACE FLOW IRRIGATION SCHEMES

MINOR IRRIGATION CENSUS (1993-94)

Table 4.1 Construction of Schemes over the year

(in Nos.)

Sl. No.	Name of State/UTs.	Construction of Flow Schemes over the years								Total (3 to 10)
		Upto 1986-87	During 1987-88	During 1988-89	During 1989-90	During 1990-91	During 1991-92	During 1992-93	During 1993-94	
1	2	3	4	5	6	7	8	9	10	11
1.	ANDHRA PRADESH	76193	855	695	251	304	343	280	1032	79953
2.	ARUNACHAL PRADESH	1604	320	288	296	313	265	241	261	3588
3.	ASSAM	1479	39	27	55	58	144	202	343	2347
4.	BIHAR	48821	1676	1545	1654	4330	3917	3191	2114	67248
5.	GOA	3127	21	5	8	4	4	3	4	3176
6.	GUJARAT	0	0	0	0	0	0	0	0	0
7.	HARYANA	170	70	99	113	27	16	10	5	510
8.	HIMACHAL PRADESH	14057	62	83	27	17	35	25	39	14345
9.	JAMMU & KASHMIR	7823	646	304	153	38	51	70	59	9144
10.	KARNATAKA	28691	1342	1260	1308	1066	851	785	3783	39086
11.	KERALA	7989	443	361	326	308	310	328	316	10381
12.	MADHYA PRADESH	42343	1665	1702	1637	4138	1579	1349	1711	56124
13.	MAHARASHTRA	0	0	0	0	0	0	0	0	0
14.	MANIPUR	19	10	10	32	34	31	45	59	240
15.	MEGHALAYA	6784	1287	1277	945	774	839	707	1651	14264
16.	MIZORAM	2782	277	278	373	315	261	173	316	4775
17.	NAGALAND	7615	221	2027	1037	1183	744	648	584	14059
18.	ORISSA	18710	1508	709	756	776	568	497	579	24103
19.	PUNJAB	229	31	23	44	28	2	3	34	394
20.	RAJASTHAN	2714	58	72	49	30	19	39	121	3102
21.	SIKKIM	478	54	64	59	60	55	38	46	854
22.	TAMIL NADU	75204	478	1047	307	4211	16	24	3436	84723
23.	TRIPURA	124	27	35	25	44	61	82	202	600
24.	UTTAR PRADESH	14184	1364	1377	1105	1246	1428	1263	1917	23884
25.	WEST BENGAL	58657	1443	1181	870	756	566	592	2389	66454
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	5	1	1	1	1	2	0	0	11
28.	DELHI	1376	5	1	0	0	0	1	0	1383
29.	PONDICHERRY	17506	126	10	1	1	1	0	0	17645
Total :		438684	14029	14481	11432	20062	12108	10596	21001	542393

MINOR IRRIGATION CENSUS (1993-94)

Table 4.2 Distribution according to ownership

(in Nos.)

Sl. No.	Name of State/UTs.	Flow Schemes Owned by						Total (3 to 8)
		Govt. Owned	Coop. Societies	Panchayat Owned	Group of farmers	Individual farmers	Others	
1	2	3	4	5	6	7	8	9
1.	ANDHRA PRADESH	53184	659	15238	987	7062	2823	79953
2.	ARUNACHAL PRADESH	1539	17	31	778	1179	44	3588
3.	ASSAM	848	50	103	613	732	1	2347
4.	BIHAR	33133	134	1013	8540	24220	208	67248
5.	GOA	44	33	0	920	2082	97	3176
6.	GUJARAT	0	0	0	0	0	0	0
7.	HARYANA	2	1	2	332	173	0	510
8.	HIMACHAL PRADESH	5082	23	389	7898	749	204	14345
9.	JAMMU & KASHMIR	3069	808	70	3635	1163	399	9144
10.	KARNATAKA	6160	21	13	798	31669	425	39086
11.	KERALA	4138	118	1257	1227	3553	88	10381
12.	MADHYA PRADESH	15962	194	2162	2479	33911	1416	56124
13.	MAHARASHTRA	0	0	0	0	0	0	0
14.	MANIPUR	240	0	0	0	0	0	240
15.	MEGHALAYA	640	5	1	1412	12192	14	14264
16.	MIZORAM	1	0	0	0	4774	0	4775
17.	NAGALAND	1	0	0	474	13583	1	14059
18.	ORISSA	12139	61	4027	2183	5569	124	24103
19.	PUNJAB	8	2	4	1	377	2	394
20.	RAJASTHAN	1857	16	196	783	233	17	3102
21.	SIKKIM	615	0	1	235	0	3	854
22.	TAMIL NADU	15710	341	4900	4762	51582	7428	84723
23.	TRIPURA	270	3	22	52	246	7	600
24.	UTTAR PRADESH	4445	72	7209	5229	6791	138	23884
25.	WEST BENGAL	5509	467	3243	37296	19209	730	66454
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	9	1	0	0	1	0	11
28.	DELHI	63	0	0	0	1292	28	1383
29.	PONDICHERRY	68	3	21	262	16376	915	17645
Total :		164736	3029	39902	80896	238718	15112	542393

MINOR IRRIGATION CENSUS(1993-94)

Table 4.3 Distribution of Schemes according to the holdings

(in Nos.)						
According to Farmers' Holding size						
Sl. No.	Name of State/UTs.	Marginal (0-1 ha)	Small (1-2 ha)	Medium (2-10 ha)	Big (>10 ha)	Total (3 to 6)
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	2950	1525	2345	1229	8049
2.	ARUNACHAL PRADESH	584	507	668	198	1957
3.	ASSAM	8	140	779	418	1345
4.	BIHAR	10916	9325	7396	5123	32760
5.	GOA	2031	340	527	104	3002
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	77	134	268	26	505
8.	HIMACHAL PRADESH	245	176	267	7959	8647
9.	JAMMU & KASHMIR	5048	2242	1229	625	9144
10.	KARNATAKA	9715	8671	11144	2937	32467
11.	KERALA	2309	691	1126	654	4780
12.	MADHYA PRADESH	7344	8782	12736	7528	36390
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0
15.	MEGHALAYA	7321	4432	1598	253	13604
16.	MIZORAM	2127	2282	361	4	4774
17.	NAGALAND	2645	3693	7068	651	14057
18.	ORISSA	1670	1916	3013	1153	7752
19.	PUNJAB	50	102	193	33	378
20.	RAJASTHAN	104	128	574	210	1016
21.	SIKKIM	0	0	0	235	235
22.	TAMIL NADU	26108	3211	3448	23577	56344
23.	TRIPURA	121	75	74	28	298
24.	UTTAR PRADESH	7695	2329	1613	383	12020
25.	WEST BENGAL	33367	14170	7365	1603	56505
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	1	0	1
28.	DELHI	363	449	461	19	1292
29.	PONDICHERRY	14580	1450	597	11	16638
Total :		137378	66770	64851	54961	323960

MINOR IRRIGATION CENSUS (1993-94)

Table 4.4 Distribution of Schemes according to social status

(in Nos.)							
Sl. No.	Name of State/UTs.	According to Social Status of farmers				Owned by other than ind./group of farmers	Grand Total (6 + 7)
		Schedule Caste	Schedule Tribe	Others	Total (3+4+5)		
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	661	864	6524	8049	71904	79953
2.	ARUNACHAL PRADESH	65	1865	27	1957	1631	3588
3.	ASSAM	22	460	863	1345	1002	2347
4.	BIHAR	4812	13129	14819	32760	34488	67248
5.	GOA	18	1	2983	3002	174	3176
6.	GUJARAT	0	0	0	0	0	0
7.	HARYANA	133	3	369	505	5	510
8.	HIMACHAL PRADESH	146	58	8443	8647	5698	14345
9.	JAMMU & KASHMIR	82	0	4716	4798	4346	9144
10.	KARNATAKA	2433	1212	28822	32467	6619	39086
11.	KERALA	180	28	4572	4780	5601	10381
12.	MADHYA PRADESH	2074	10603	23713	36390	19734	56124
13.	MAHARASHTRA	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	240	240
15.	MEGHALAYA	137	13406	61	13604	660	14264
16.	MIZORAM	11	4762	1	4774	1	4775
17.	NAGALAND	28	14020	9	14057	2	14059
18.	ORISSA	588	1875	5289	7752	16351	24103
19.	PUNJAB	11	7	360	378	16	394
20.	RAJASTHAN	82	69	865	1016	2086	3102
21.	SIKKIM	0	0	235	235	619	854
22.	TAMIL NADU	3146	598	52600	56344	28379	84723
23.	TRIPURA	60	79	159	298	302	600
24.	UTTAR PRADESH	1427	331	10262	12020	11864	23884
25.	WEST BENGAL	8164	2768	45573	56505	9949	66454
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	1	1	10	11
28.	DELHI	6	2	1284	1292	91	1383
29.	PONDICHERY	255	27	16356	16638	1007	17645
Total :		24541	66167	228906	319614	222779	542393

MINOR IRRIGATION CENSUS(1993-94)

Table 4.5 Distribution of Schemes by its type

(in Nos.)						
Sl. No.	Name of State/UTs.	Type of Flow Schemes				Total (3 to 6)
		Storage	Permanent Diversion	Temporary Diversion	Water C'tion	
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	70293	4177	2676	2807	79953
2.	ARUNACHAL PRADESH	62	440	3054	32	3588
3.	ASSAM	183	195	1953	16	2347
4.	BIHAR	50813	8112	1829	6494	67248
5.	GOA	1396	551	1180	49	3176
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	458	3	6	43	510
8.	HIMACHAL PRADESH	799	5865	7540	141	14345
9.	JAMMU & KASHMIR	116	8493	535	0	9144
10.	KARNATAKA	25105	6099	5178	2704	39086
11.	KERALA	6534	2442	1166	239	10381
12.	MADHYA PRADESH	34382	6534	11427	3781	56124
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	6	198	36	0	240
15.	MEGHALAYA	803	2526	10440	495	14264
16.	MIZORAM	55	584	4136	0	4775
17.	NAGALAND	15	1792	12250	2	14059
18.	ORISSA	17028	4264	1989	822	24103
19.	PUNJAB	213	150	26	5	394
20.	RAJASTHAN	2508	275	244	75	3102
21.	SIKKIM	34	390	430	0	854
22.	TAMIL NADU	62253	12455	5079	4936	84723
23.	TRIPURA	343	27	196	34	600
24.	UTTAR PRADESH	10835	4195	8027	827	23884
25.	WEST BENGAL	55401	4721	3984	2348	66454
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	4	4	3	0	11
28.	DELHI	13	1341	29	0	1383
29.	PONDICHERRY	1191	14342	2111	1	17645
Total :		340843	90175	85524	25851	542393

MINOR IRRIGATION CENSUS (1993-94)

Table 4.6 Distribution of Schemes by its status

(in Nos.)									
Sl. No.	Name of State/UTs.	Schemes In Use	Temporary	Abandoned (Salinity)	Schemes Not in Use Dried up	Destroyed	Others	Total (4 to 8)	Grand Total (3 + 9)
1	2	3	4	5	6	7	8	9	10
1.	ANDHRA PRADESH	50766	24170	448	2384	982	1203	29187	79953
2.	ARUNACHAL PRADESH	2994	411	28	26	62	67	594	3588
3.	ASSAM	2201	143	1	0	1	1	146	2347
4.	BIHAR	59992	4184	3	2230	532	307	7256	67248
5.	GOA	3110	33	2	30	0	1	66	3176
6.	GUJARAT	0	0	0	0	0	0	0	0
7.	HARYANA	507	0	0	0	0	3	3	510
8.	HIMACHAL PRADESH	13921	201	52	71	41	59	424	14345
9.	JAMMU & KASHMIR	9113	31	0	0	0	0	31	9144
10.	KARNATAKA	29269	6462	469	1397	786	703	9817	39086
11.	KERALA	10094	237	2	3	30	15	287	10381
12.	MADHYA PRADESH	53578	1158	411	226	277	474	2546	56124
13.	MAHARASHTRA	0	0	0	0	0	0	0	0
14.	MANIPUR	240	0	0	0	0	0	0	240
15.	MEGHALAYA	12363	894	84	330	470	123	1901	14264
16.	MIZORAM	4389	331	26	2	27	0	386	4775
17.	NAGALAND	13119	843	3	0	90	4	940	14059
18.	ORISSA	21807	2065	64	52	69	46	2296	24103
19.	PUNJAB	390	1	0	3	0	0	4	394
20.	RAJASTHAN	2170	725	15	133	6	53	932	3102
21.	SIKKIM	766	79	2	0	4	3	88	854
22.	TAMIL NADU	76915	3219	442	170	347	3630	7808	84723
23.	TRIPURA	587	6	0	0	7	0	13	600
24.	UTTAR PRADESH	17568	2667	1584	623	903	539	6316	23884
25.	WEST BENGAL	61892	3029	332	511	261	429	4562	66454
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	11	0	0	0	0	0	0	11
28.	DELHI	1372	5	1	0	0	5	11	1383
29.	PONDICHERRY	17641	4	0	0	0	0	4	17645
Total :		466775	50898	3969	8191	4895	7665	75618	542393

MINOR IRRIGATION CENSUS (1993-94)
Table 4.7 Distribution of Schemes according to Finance source

(in Nos.)								
Source of Finance for constructing Schemes								
Sl. No.	Name of State/UTs.	Govt. Fund	Farmers Saving	Loan & Saving	Subsidy & Bank loan	Subsidy Only	Others	Total (3 to 8)
1	2	3	4	5	6	7	8	9
1.	ANDHRA PRADESH	19235	1653	1090	392	885	3514	26769
2.	ARUNACHAL PRADESH	156	1493	38	8	197	157	2049
3.	ASSAM	95	562	34	28	770	10	1499
4.	BIHAR	7985	4253	704	11663	8646	864	34115
5.	GOA	244	1401	77	42	27	1341	3132
6.	GUJARAT	0	0	0	0	0	0	0
7.	HARYANA	18	289	189	0	4	8	508
8.	HIMACHAL PRADESH	933	4675	67	105	321	3162	9263
9.	JAMMU & KASHMIR	3099	5602	14	230	45	154	9144
10.	KARNATAKA	17305	7611	4403	770	240	2597	32926
11.	KERALA	3167	2087	137	353	133	366	6243
12.	MADHYA PRADESH	14912	18947	1018	876	1115	3294	40162
13.	MAHARASHTRA	0	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0	0
15.	MEGHALAYA	1262	10538	280	36	1004	504	13624
16.	MIZORAM	348	3782	1	33	587	23	4774
17.	NAGALAND	1	8	4	3	13026	1016	14058
18.	ORISSA	5079	4856	345	652	789	243	11964
19.	PUNJAB	131	240	8	0	7	0	386
20.	RAJASTHAN	369	737	33	30	14	62	1245
21.	SIKKIM	0	0	0	0	0	239	239
22.	TAMIL NADU	41234	3881	9179	3848	5662	5209	69013
23.	TRIPURA	67	189	5	17	37	15	330
24.	UTTAR PRADESH	8683	2016	807	3247	3586	1100	19439
25.	WEST BENGAL	8635	41766	666	373	2753	6752	60945
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	1	0	1	0	0	2
28.	DELHI	435	1	9	0	0	875	1320
29.	PONDICHERRY	13926	3411	240	0	0	0	17577
Total :		147319	119999	19348	22707	39848	31505	380726

Table 4.8 Schemes according to water distribution system

MINOR IRRIGATION CENSUS (1993-94)							
(in Nos.)							
According to Water Distribution System							
Sl. No.	Name of State/UTs.	Sprinkler	Drip Irri.	Open Channel	Under gr. Channel	Others	Total (3 to 7)
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	749	122	75517	91	3474	79953
2.	ARUNACHAL PRADESH	13	17	3457	31	70	3588
3.	ASSAM	3	1	2331	4	8	2347
4.	BIHAR	2092	381	50593	2659	11523	67248
5.	GOA	14	5	2682	56	419	3176
6.	GUJARAT	0	0	0	0	0	0
7.	HARYANA	35	2	472	0	1	510
8.	HIMACHAL PRADESH	50	39	13671	121	464	14345
9.	JAMMU & KASHMIR	6	0	7886	78	1174	9144
10.	KARNATAKA	2400	437	26730	3929	5590	39086
11.	KERALA	123	19	8448	861	930	10381
12.	MADHYA PRADESH	3119	450	38738	4668	9149	56124
13.	MAHARASHTRA	0	0	0	0	0	0
14.	MANIPUR	0	0	240	0	0	240
15.	MEGHALAYA	470	836	11818	596	544	14264
16.	MIZORAM	1	9	4379	0	386	4775
17.	NAGALAND	6	6	14037	8	2	14059
18.	ORISSA	174	60	20293	192	3384	24103
19.	PUNJAB	6	5	376	7	0	394
20.	RAJASTHAN	191	15	2418	47	431	3102
21.	SIKKIM	0	0	838	11	5	854
22.	TAMIL NADU	7306	751	65207	870	10589	84723
23.	TRIPURA	3	0	505	20	72	600
24.	UTTAR PRADESH	401	150	21016	411	1906	23884
25.	WEST BENGAL	2100	780	54176	401	8997	66454
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	11	0	0	11
28.	DELHI	7	3	1373	0	0	1383
29.	PONDICHERRY	74	21	17527	13	10	17645
Total :		19343	4109	444739	15074	59128	542393

MINOR IRRIGATION CENSUS (1993-94)

Table 4.9 Schemes in the Major/Medium Project Command

(in Nos.)					
Sl. No.	Name of State/UTs.	Location of Schemes			
		On the Command	Outside Command	Augmen- tation	Total (3 to 5)
1	2	3	4	5	6
1.	ANDHRA PRADESH	4226	75432	295	79953
2.	ARUNACHAL PRADESH	12	3575	1	3588
3.	ASSAM	0	2347	0	2347
4.	BIHAR	3759	63189	300	67248
5.	GOA	142	3032	2	3176
6.	GUJARAT	0	0	0	0
7.	HARYANA	56	454	0	510
8.	HIMACHAL PRADESH	107	14238	0	14345
9.	JAMMU & KASHMIR	531	8613	0	9144
10.	KARNATAKA	10897	27741	448	39086
11.	KERALA	1990	8388	3	10381
12.	MADHYA PRADESH	4738	51386	0	56124
13.	MAHARASHTRA	0	0	0	0
14.	MANIPUR	0	240	0	240
15.	MEGHALAYA	1004	13256	4	14264
16.	MIZORAM	4	4771	0	4775
17.	NAGALAND	0	14059	0	14059
18.	ORISSA	1868	22214	21	24103
19.	PUNJAB	160	210	24	394
20.	RAJASTHAN	168	2927	7	3102
21.	SIKKIM	0	854	0	854
22.	TAMIL NADU	41445	42064	1214	84723
23.	TRIPURA	19	581	0	600
24.	UTTAR PRADESH	3600	20255	29	23884
25.	WEST BENGAL	11133	55321	0	66454
26.	ANDAMAN & NICOBARS	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	11	0	11
28.	DELHI	3	1380	0	1383
29.	PONDICHERRY	5	17637	3	17645
Total :		85867	454175	2351	542393

MINOR IRRIGATION CENSUS (1993-94)

Table 4.10 Average length of Water Conveyance Channel

(in Nos.)						
Sl. No.	Name of State/UTs.	Total Number of Schemes	Average length of channels			
			Pucca Channel	Kuccha Channel	Under gr. Channel	Total (4+5+6)
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	79953	29	407	5	441
2.	ARUNACHAL PRADESH	3588	191	732	41	964
3.	ASSAM	2347	799	2135	21	2955
4.	BIHAR	67248	26	488	72	586
5.	GOA	3176	37	296	25	358
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	510	14	165	0	179
8.	HIMACHAL PRADESH	14345	160	819	4	983
9.	JAMMU & KASHMIR	9144	111	157	1	269
10.	KARNATAKA	39086	339	260	33	632
11.	KERALA	10381	248	449	18	715
12.	MADHYA PRADESH	56124	25	158	36	219
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	240	36	1641	0	1677
15.	MEGHALAYA	14264	21	192	6	219
16.	MIZORAM	4775	11	234	0	245
17.	NAGALAND	14059	330	1	0	331
18.	ORISSA	24103	9	117	2	128
19.	PUNJAB	394	25	254	14	293
20.	RAJASTHAN	3102	773	928	68	1769
21.	SIKKIM	854	658	225	90	973
22.	TAMIL NADU	84723	69	92	7	168
23.	TRIPURA	600	275	719	62	1056
24.	UTTAR PRADESH	23884	68	134	9	211
25.	WEST BENGAL	66454	26	341	35	402
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	11	244	248	0	492
28.	DELHI	1383	4	151	2	157
29.	PONDICHERRY	17645	18	432	0	450
Total :		542393	4546	11775	551	16872

MINOR IRRIGATION CENSUS(1993-94)

Table 4.11 Culturable Command Area and Potential Created

(in Ha.)							
Sl. No.	Name of State/UTs.	Culturable Command Area	Irrigation Potential Created				Total
			Kharif	Rabi	Perennial	Others	
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	1426499	1220903	431646	15613	711	1668873
2.	ARUNACHAL PRADESH	44796	42771	5457	249	1644	50121
3.	ASSAM	127312	121561	27968	226	1563	151318
4.	BIHAR	654044	529830	201604	8425	10759	750618
5.	GOA	9500	353	7765	1560	165	9843
6.	GUJARAT	0	0	0	0	0	0
7.	HARYANA	1891	1702	1813	0	0	3515
8.	HIMACHAL PRADESH	84915	77712	75697	1709	82	155200
9.	JAMMU & KASHMIR	266423	238012	72570	2200	0	312782
10.	KARNATAKA	203617	157258	58277	24214	10047	249796
11.	KERALA	137041	84557	98882	28527	22004	233970
12.	MADHYA PRADESH	563298	400437	262466	7188	1694	671785
13.	MAHARASHTRA	0	0	0	0	0	0
14.	MANIPUR	21021	20115	5673	0	1064	26852
15.	MEGHALAYA	60688	52188	15536	3726	1269	72719
16.	MIZORAM	6482	5453	922	267	0	6642
17.	NAGALAND	62845	64074	290	113	17	64494
18.	ORISSA	569165	582563	103275	2852	9648	698338
19.	PUNJAB	5558	3687	6417	37	110	10251
20.	RAJASTHAN	130800	22118	119636	101	256	142111
21.	SIKKIM	17201	11542	5830	1796	851	20019
22.	TAMIL NADU	747819	410103	445895	42003	71875	969876
23.	TRIPURA	7585	2752	5261	115	336	8464
24.	UTTAR PRADESH	181718	128170	113344	9641	3370	254525
25.	WEST BENGAL	381412	293085	125887	9324	30744	459040
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	106	73	33	6	3	115
28.	DELHI	3435	3070	3468	2	6	6546
29.	PONDICHERRY	13076	4343	9040	87	18	13488
Total :		5728247	4478432	2204652	159981	168236	7011301

MINOR IRRIGATION CENSUS (1993-94)

Table 4.12 Irrigation Potential Utilised

(in Ha.)						
Sl. No.	Name of State/UTs.	Actual Area Irrigated during 1993-94				
		Kharif	Rabi	Perennial	Others	Total
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	672887	243528	12572	707	929694
2.	ARUNACHAL PRADESH	25435	1525	186	666	27812
3.	ASSAM	75992	12012	161	667	88832
4.	BIHAR	395729	87891	4803	3483	491906
5.	GOA	284	7585	1489	125	9483
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	1675	1790	0	0	3465
8.	HIMACHAL PRADESH	70412	65845	1682	52	137991
9.	JAMMU & KASHMIR	229712	63428	2200	0	295340
10.	KARNATAKA	112432	42337	15534	6288	176591
11.	KERALA	74761	83661	23749	17288	199459
12.	MADHYA PRADESH	238822	180594	8473	930	428819
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	12063	3400	0	641	16104
15.	MEGHALAYA	31728	7418	1768	820	41734
16.	MIZORAM	4699	716	144	0	5559
17.	NAGALAND	37778	244	57	9	38088
18.	ORISSA	377246	49474	2810	1693	431223
19.	PUNJAB	1638	2483	34	51	4206
20.	RAJASTHAN	11884	93500	45	155	105584
21.	SIKKIM	7114	3644	1227	518	12503
22.	TAMIL NADU	290792	333626	50473	19207	694098
23.	TRIPURA	2403	4622	65	252	7342
24.	UTTAR PRADESH	99244	89566	7667	2711	199188
25.	WEST BENGAL	191047	96871	6373	22735	317026
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	64	27	8	0	99
28.	DELHI	3004	3424	3	0	6431
29.	PONDICHERRY	2735	8378	48	0	11161
Total :		2971580	1487589	141571	78998	4679738

MINOR IRRIGATION CENSUS (1993-94)

Table 4.13 Irrigation through supplementary sources

(in Ha.)						
Sl. No.	Name of State/UTs.	Supplementary Irrigation in 1993-94				
		Kharif	Rabi	Perennial	Others	Total
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	63668	25864	805	52	90389
2.	ARUNACHAL PRADESH	901	88	12	411	1412
3.	ASSAM	0	0	0	0	0
4.	BIHAR	34379	16068	945	317	51709
5.	GOA	11	302	168	9	490
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	0	0	0	0	0
8.	HIMACHAL PRADESH	42	41	0	0	83
9.	JAMMU & KASHMIR	11613	1094	0	0	12707
10.	KARNATAKA	12681	6252	1418	1526	21877
11.	KERALA	7210	8601	1247	781	17839
12.	MADHYA PRADESH	14155	9292	3730	4	27181
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0
15.	MEGHALAYA	1581	189	58	37	1865
16.	MIZORAM	2	0	0	0	2
17.	NAGALAND	0	0	0	0	0
18.	ORISSA	25127	1587	1201	10	27925
19.	PUNJAB	19	19	0	1	39
20.	RAJASTHAN	1	2488	1	0	2490
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	104358	104202	10107	3500	222167
23.	TRIPURA	16	24	0	0	40
24.	UTTAR PRADESH	6080	8093	656	239	15068
25.	WEST BENGAL	23374	8137	721	1481	33713
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0
28.	DELHI	0	0	0	0	0
29.	PONDICHERY	0	0	0	0	0
Total :		305218	192341	21069	8368	526996

MINOR IRRIGATION CENSUS (1993-94)

Table 4.14 Schemes according to the constraints

(in Nos.)									
Sl. No.	Name of State/UTs.	Total No. of Schemes in use	No. of Schemes with no cons'ts	Constraints in utilisation of Irri. Pot. Created				Total (5 to 8)	Grand Total (4 + 9)
				Non-filling of Storage	Siltation of Storage	Break down of Channel	Other Reasons		
1	2	3	4	5	6	7	8	9	10
1.	ANDHRA PRADESH	50766	26715	14112	1118	3854	4967	24051	50766
2.	ARUNACHAL PRADESH	2994	1500	67	114	586	727	1494	2994
3.	ASSAM	2201	0	56	12	204	1929	2201	2201
4.	BIHAR	59992	2648	18775	9237	4985	24347	57344	59992
5.	GOA	3110	0	219	33	32	2826	3110	3110
6.	GUJARAT	0	0	0	0	0	0	0	0
7.	HARYANA	507	0	84	21	20	382	507	507
8.	HIMACHAL PRADESH	13921	9213	109	17	1894	2688	4708	13921
9.	JAMMU & KASHMIR	9113	0	0	0	0	31	31	31
10.	KARNATAKA	29269	18089	4464	1885	2256	2575	11180	29269
11.	KERALA	10094	0	1261	1264	786	6783	10094	10094
12.	MADHYA PRADESH	53578	25629	1267	198	4247	22237	27949	53578
13.	MAHARASHTRA	0	0	0	0	0	0	0	0
14.	MANIPUR	240	0	0	0	0	240	240	240
15.	MEGHALAYA	12363	0	4104	79	1562	6618	12363	12363
16.	MIZORAM	4389	4300	0	0	0	89	89	4389
17.	NAGALAND	13119	5377	8	1	684	7049	7742	13119
18.	ORISSA	21807	4214	2260	2427	1303	11603	17593	21807
19.	PUNJAB	390	0	294	18	3	75	390	390
20.	RAJASTHAN	2170	1735	255	29	66	85	435	2170
21.	SIKKIM	766	0	0	9	407	350	766	766
22.	TAMIL NADU	76915	203	5741	1255	32452	37264	76712	76915
23.	TRIPURA	587	258	58	8	218	45	329	587
24.	UTTAR PRADESH	17568	26	2194	550	4508	10290	17542	17568
25.	WEST BENGAL	61892	0	11014	10035	1829	39014	61892	61892
26.	ANDAMAN & NICOBARS	0	0	0	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	11	11	0	0	0	0	0	11
28.	DELHI	1372	1339	0	0	0	33	33	1372
29.	PONDICHERRY	17641	14189	5	2	14	3431	3452	17641
Total :		466775	115446	66347	28312	61910	185678	342247	457693

V. SURFACE LIFT IRRIGATION SCHEMES

MINOR IRRIGATION CENSUS (1993-94)

Table 5.1 Construction of Schemes over the year

(in Nos.)

Sl. No.	Name of State/UTs.	Construction of Lift Schemes over the years								Total (3 to 10)
		Upto 1986-87	During 1987-88	During 1988-89	During 1989-90	During 1990-91	During 1991-92	During 1992-93	During 1993-94	
1	2	3	4	5	6	7	8	9	10	11
1.	ANDHRA PRADESH	8202	1237	1311	1546	2201	1849	1382	1698	19426
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0	0
3.	ASSAM	3931	1159	1471	1118	764	348	220	99	9110
4.	BIHAR	7041	339	331	392	1109	931	544	379	11066
5.	GOA	452	42	36	73	37	25	34	53	752
6.	GUJARAT	0	0	0	0	0	0	0	0	0
7.	HARYANA	167	3	7	2	2	1	0	0	182
8.	HIMACHAL PRADESH	402	25	19	11	38	16	19	27	557
9.	JAMMU & KASHMIR	289	29	14	9	4	2	0	4	351
10.	KARNATAKA	16211	2413	2402	2786	3293	2024	1346	1873	32348
11.	KERALA	4186	874	878	1093	1376	1183	912	762	11264
12.	MADHYA PRADESH	105664	6625	7864	10302	19712	12338	12008	14362	188875
13.	MAHARASHTRA	0	0	0	0	0	0	0	0	0
14.	MANIPUR	8	0	0	0	0	2	7	3	20
15.	MEGHALAYA	7	0	3	1	0	0	0	4	15
16.	MIZORAM	6	1	0	1	0	1	1	2	12
17.	NAGALAND	2	0	0	0	0	0	7	10	19
18.	ORISSA	13749	973	929	1087	1255	901	643	1067	20604
19.	PUNJAB	505	38	87	56	37	18	12	11	764
20.	RAJASTHAN	160	21	15	24	13	15	29	12	289
21.	SIKKIM	0	0	0	0	0	0	0	0	0
22.	TAMIL NADU	8975	281	130	127	1478	347	163	76	11577
23.	TRIPURA	283	58	65	50	51	54	76	192	829
24.	UTTAR PRADESH	1278	200	276	308	425	369	314	296	3466
25.	WEST BENGAL	56273	3580	3038	4186	3589	3021	2593	7365	83645
26.	ANDAMAN & NICOBARS	421	163	131	125	119	76	62	113	1210
27.	DADRA & NAGAR HAVELI	23	4	4	5	5	5	8	0	54
28.	DELHI	0	0	0	0	0	0	0	0	0
29.	PONDICHERRY	404	0	2	0	0	0	0	0	406
Total :		228639	18065	19013	23302	35508	23526	20380	28408	396841

MINOR IRRIGATION CENSUS (1993-94)

Table 5.2 Distribution according to ownership

(in Nos.)								
Lift Schemes Owned by								
Sl. No.	Name of State/UTs.	Govt. Owned	Coop. Societies	Panchayat Owned	Group of farmers	Individual farmers	Others	Total (3 to 8)
1	2	3	4	5	6	7	8	9
1.	ANDHRA PRADESH	676	317	131	2513	15416	373	19426
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0
3.	ASSAM	786	1	2	75	8246	0	9110
4.	BIHAR	4841	13	66	360	5754	32	11066
5.	GOA	49	18	0	54	623	8	752
6.	GUJARAT	0	0	0	0	0	0	0
7.	HARYANA	0	0	1	17	164	0	182
8.	HIMACHAL PRADESH	403	0	0	84	69	1	557
9.	JAMMU & KASHMIR	300	2	0	19	29	1	351
10.	KARNATAKA	478	6	0	586	31250	28	32348
11.	KERALA	420	58	71	373	10301	41	11264
12.	MADHYA PRADESH	10492	551	870	10423	164201	2338	188875
13.	MAHARASHTRA	0	0	0	0	0	0	0
14.	MANIPUR	20	0	0	0	0	0	20
15.	MEGHALAYA	12	0	0	1	2	0	15
16.	MIZORAM	3	0	0	2	7	0	12
17.	NAGALAND	0	0	0	1	18	0	19
18.	ORISSA	7702	58	447	2539	9824	34	20604
19.	PUNJAB	11	1	1	1	750	0	764
20.	RAJASTHAN	79	5	1	116	82	6	289
21.	SIKKIM	0	0	0	0	0	0	0
22.	TAMIL NADU	166	14	6	3243	6573	1575	11577
23.	TRIPURA	411	0	3	8	396	11	829
24.	UTTAR PRADESH	512	1	52	170	2696	35	3466
25.	WEST BENGAL	3167	251	1564	28604	47706	2353	83645
26.	ANDAMAN & NICOBARS	3	0	1	0	1206	0	1210
27.	DADRA & NAGAR HAVELI	21	0	0	0	33	0	54
28.	DELHI	0	0	0	0	0	0	0
29.	PONDICHERRY	0	0	0	0	401	5	406
Total :		30552	1296	3216	49189	305747	6841	396841

MINOR IRRIGATION CENSUS (1993-94)

Table 5.3 Distribution of Schemes according to the holdings

(in Nos.)						
According to Farmers' Holding size						
Sl. No.	Name of State/UTs.	Marginal (0-1 ha)	Small (1-2 ha)	Medium (2-10 ha)	Big (>10 ha)	Total (3 to 6)
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	3684	5576	7400	1269	17929
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	186	1721	6391	23	8321
4.	BIHAR	1873	2137	1812	292	6114
5.	GOA	197	147	256	77	677
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	0	2	157	22	181
8.	HIMACHAL PRADESH	16	22	24	91	153
9.	JAMMU & KASHMIR	199	60	53	39	351
10.	KARNATAKA	7967	8530	13294	2045	31836
11.	KERALA	5953	2658	1666	397	10674
12.	MADHYA PRADESH	22746	39226	88634	24018	174624
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0
15.	MEGHALAYA	0	0	1	2	3
16.	MIZORAM	0	0	8	1	9
17.	NAGALAND	1	0	2	16	19
18.	ORISSA	2902	3890	4462	1109	12363
19.	PUNJAB	33	97	497	124	751
20.	RAJASTHAN	9	30	117	42	198
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	6334	1576	1507	399	9816
23.	TRIPURA	124	159	114	7	404
24.	UTTAR PRADESH	603	1056	919	288	2866
25.	WEST BENGAL	44058	19428	11184	1640	76310
26.	ANDAMAN & NICOBARS	85	400	720	1	1206
27.	DADRA & NAGAR HAVELI	11	12	8	2	33
28.	DELHI	0	0	0	0	0
29.	PONDICHERRY	307	56	38	0	401
Total :		97288	86783	139264	31904	355239

MINOR IRRIGATION CENSUS(1993-94)

Table 5.4 Distribution of Schemes according to social status

(in Nos.)							
Sl. No.	Name of State/UTs.	According to Social Status of farmers				Owned by other than ind./group of farmers	Grand Total (6 + 7)
		Schedule Caste	Schedule Tribe	Others	Total (3+4+5)		
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	1200	2135	14594	17929	1497	19426
2.	ARUNACHAL PRADESH	0	0	0	0	0	0
3.	ASSAM	604	1861	5856	8321	789	9110
4.	BIHAR	491	3025	2598	6114	4952	11066
5.	GOA	5	0	672	677	75	752
6.	GUJARAT	0	0	0	0	0	0
7.	HARYANA	0	0	181	181	1	182
8.	HIMACHAL PRADESH	7	7	139	153	404	557
9.	JAMMU & KASHMIR	11	0	37	48	303	351
10.	KARNATAKA	1536	1222	29078	31836	512	32348
11.	KERALA	101	69	10504	10674	590	11264
12.	MADHYA PRADESH	11300	34418	128906	174624	14251	188875
13.	MAHARASHTRA	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	20	20
15.	MEGHALAYA	0	3	0	3	12	15
16.	MIZORAM	0	9	0	9	3	12
17.	NAGALAND	0	19	0	19	0	19
18.	ORISSA	1042	2277	9044	12363	8241	20604
19.	PUNJAB	38	0	713	751	13	764
20.	RAJASTHAN	12	81	105	198	91	289
21.	SIKKIM	0	0	0	0	0	0
22.	TAMIL NADU	219	37	9560	9816	1761	11577
23.	TRIPURA	69	80	255	404	425	829
24.	UTTAR PRADESH	240	263	2363	2866	600	3466
25.	WEST BENGAL	13357	1508	61445	76310	7335	83645
26.	ANDAMAN & NICOBARS	2	19	1185	1206	4	1210
27.	DADRA & NAGAR HAVELI	1	31	1	33	21	54
28.	DELHI	0	0	0	0	0	0
29.	PONDICHERRY	41	0	360	401	5	406
Total :		30276	47064	277596	354936	41905	396841

MINOR IRRIGATION CENSUS (1993-94)

Table 5.5 Distribution of Schemes by its type

(in Nos.)						
Type of Lift Schemes						
Sl. No.	Name of State/UTs.	On River	On Stream	On Drain	On Tank/ Pond	Total (3 to 6)
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	7846	9071	1657	852	19426
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	1320	507	279	7004	9110
4.	BIHAR	3632	737	521	6176	11066
5.	GOA	598	91	15	48	752
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	150	0	32	0	182
8.	HIMACHAL PRADESH	208	338	5	6	557
9.	JAMMU & KASHMIR	170	65	82	34	351
10.	KARNATAKA	25256	4963	542	1587	32348
11.	KERALA	3827	1676	520	5241	11264
12.	MADHYA PRADESH	120025	53863	9422	5565	188875
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	20	0	0	0	20
15.	MEGHALAYA	4	8	2	1	15
16.	MIZORAM	0	4	2	6	12
17.	NAGALAND	5	6	0	8	19
18.	ORISSA	9784	1257	4294	5269	20604
19.	PUNJAB	540	100	124	0	764
20.	RAJASTHAN	221	41	6	21	289
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	6997	2724	1103	753	11577
23.	TRIPURA	424	200	57	148	829
24.	UTTAR PRADESH	1495	1327	398	246	3466
25.	WEST BENGAL	12949	2516	17513	50667	83645
26.	ANDAMAN & NICOBARS	111	270	73	756	1210
27.	DADRA & NAGAR HAVELI	26	20	5	3	54
28.	DELHI	0	0	0	0	0
29.	PONDICHERRY	7	0	399	0	406
Total :		195615	79784	37051	84391	396841

MINOR IRRIGATION CENSUS (1993-94)

Table 5.6 Distribution of Schemes by its status

(in Nos.)									
Sl. No.	Name of State/UTs.	Schemes In Use	Temporary	Schemes Abandoned (Salinity)	Not in Use Dried up	Sinking	Others	Total (4 to 8)	Grand Total (3 + 9)
1	2	3	4	5	6	7	8	9	10
1.	ANDHRA PRADESH	18812	470	24	15	2	103	614	19426
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0
3.	ASSAM	7564	1473	10	18	33	12	1546	9110
4.	BIHAR	9031	1093	2	503	226	211	2035	11066
5.	GOA	746	6	0	0	0	0	6	752
6.	GUJARAT	0	0	0	0	0	0	0	0
7.	HARYANA	182	0	0	0	0	0	0	182
8.	HIMACHAL PRADESH	536	17	0	1	3	0	21	557
9.	JAMMU & KASHMIR	325	26	0	0	0	0	26	351
10.	KARNATAKA	29506	1820	121	68	125	708	2842	32348
11.	KERALA	11253	7	0	3	0	1	11	11264
12.	MADHYA PRADESH	186928	583	209	343	271	541	1947	188875
13.	MAHARASHTRA	0	0	0	0	0	0	0	0
14.	MANIPUR	20	0	0	0	0	0	0	20
15.	MEGHALAYA	8	4	1	0	2	0	7	15
16.	MIZORAM	12	0	0	0	0	0	0	12
17.	NAGALAND	19	0	0	0	0	0	0	19
18.	ORISSA	18197	2036	70	42	49	210	2407	20604
19.	PUNJAB	764	0	0	0	0	0	0	764
20.	RAJASTHAN	280	0	8	0	0	1	9	289
21.	SIKKIM	0	0	0	0	0	0	0	0
22.	TAMIL NADU	8743	2066	415	83	37	233	2834	11577
23.	TRIPURA	800	20	7	0	0	2	29	829
24.	UTTAR PRADESH	3188	196	51	10	13	8	278	3466
25.	WEST BENGAL	76301	4666	286	804	311	1277	7344	83645
26.	ANDAMAN & NICOBARS	942	115	5	10	1	137	268	1210
27.	DADRA & NAGAR HAVELI	53	0	1	0	0	0	1	54
28.	DELHI	0	0	0	0	0	0	0	0
29.	PONDICHERRY	405	0	1	0	0	0	1	406
Total :		374615	14598	1211	1900	1073	3444	22226	396841

MINOR IRRIGATION CENSUS (1993-94)

Table 5.7 Distribution of Schemes according to Finance source

(in Nos.)								
Source of Finance for constructing Schemes								
Sl. No.	Name of State/UTs.	Govt. Fund	Farmers Saving	Loan & Saving	Subsidy & Bank loan	Subsidy Only	Others	Total (3 to 8)
1	2	3	4	5	6	7	8	9
1.	ANDHRA PRADESH	12766	2171	2092	1289	215	217	18750
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0
3.	ASSAM	19	1013	145	1884	5261	2	8324
4.	BIHAR	1467	1555	145	1563	1366	129	6225
5.	GOA	137	379	115	61	0	11	703
6.	GUJARAT	0	0	0	0	0	0	0
7.	HARYANA	16	163	2	0	1	0	182
8.	HIMACHAL PRADESH	51	28	18	42	8	7	154
9.	JAMMU & KASHMIR	0	14	0	310	0	27	351
10.	KARNATAKA	9454	13037	6144	2028	667	540	31870
11.	KERALA	489	5949	2062	1712	406	226	10844
12.	MADHYA PRADESH	74311	59198	12515	23573	2892	5894	178383
13.	MAHARASHTRA	0	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	0	0
15.	MEGHALAYA	1	1	1	0	0	0	3
16.	MIZORAM	0	0	1	8	0	0	9
17.	NAGALAND	0	0	0	0	19	0	19
18.	ORISSA	2343	7588	1300	1032	403	236	12902
19.	PUNJAB	138	598	15	2	0	0	753
20.	RAJASTHAN	94	68	41	7	0	0	210
21.	SIKKIM	0	0	0	0	0	0	0
22.	TAMIL NADU	9325	635	368	49	353	681	11411
23.	TRIPURA	267	14	124	9	4	0	418
24.	UTTAR PRADESH	1572	645	345	308	34	50	2954
25.	WEST BENGAL	4721	62430	2970	2143	856	7358	80478
26.	ANDAMAN & NICOBARS	57	148	7	5	8	982	1207
27.	DADRA & NAGAR HAVELI	7	5	14	1	6	0	33
28.	DELHI	0	0	0	0	0	0	0
29.	PONDICHERRY	370	0	36	0	0	0	406
Total :		117605	155639	28460	36026	12499	16360	366589

MINOR IRRIGATION CENSUS (1993-94)

Table 5.8 Schemes according to water distribution system

(in Nos.)

Sl. No.	Name of State/UTs.	According to Water Distribution System					Total (3 to 7)
		Sprinkler	Drip Irri.	Open Channel	Under gr. Channel	Others	
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	457	35	12209	4999	1726	19426
2.	ARUNACHAL PRADESH	0	0	0	0	0	0
3.	ASSAM	7	7	8862	13	221	9110
4.	BIHAR	353	111	7490	1049	2063	11066
5.	GOA	40	11	429	157	115	752
6.	GUJARAT	0	0	0	0	0	0
7.	HARYANA	0	2	32	148	0	182
8.	HIMACHAL PRADESH	12	2	299	198	46	557
9.	JAMMU & KASHMIR	7	0	344	0	0	351
10.	KARNATAKA	811	276	15729	11699	3833	32348
11.	KERALA	129	91	6800	2018	2226	11264
12.	MADHYA PRADESH	5048	1834	95406	70338	16249	188875
13.	MAHARASHTRA	0	0	0	0	0	0
14.	MANIPUR	0	0	20	0	0	20
15.	MEGHALAYA	1	1	11	1	1	15
16.	MIZORAM	0	0	11	0	1	12
17.	NAGALAND	0	0	0	0	19	19
18.	ORISSA	178	69	17227	1692	1438	20604
19.	PUNJAB	10	4	670	80	0	764
20.	RAJASTHAN	5	2	193	73	16	289
21.	SIKKIM	0	0	0	0	0	0
22.	TAMIL NADU	1079	66	7614	533	2285	11577
23.	TRIPURA	8	0	479	306	36	829
24.	UTTAR PRADESH	85	36	3147	33	165	3466
25.	WEST BENGAL	2780	491	68600	3558	8216	83645
26.	ANDAMAN & NICOBARS	1	0	49	0	1160	1210
27.	DADRA & NAGAR HAVELI	0	0	53	1	0	54
28.	DELHI	0	0	0	0	0	0
29.	PONDICHERRY	0	0	406	0	0	406
Total :		11011	3038	246080	96896	39816	396841

MINOR IRRIGATION CENSUS(1993-94)

Table 5.9 Distribution of Schemes according to lifting device

(in Nos.)

According to Water Lifting Devices for Schemes							
Sl. No.	Name of State/UTs.	Electric Pumps	Diesel Pumps	Wind Mills	Solar Pumps	Others	Total (3 to 7)
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	16038	3308	8	4	68	19426
2.	ARUNACHAL PRADESH	0	0	0	0	0	0
3.	ASSAM	653	8444	0	1	12	9110
4.	BIHAR	954	7329	29	25	2729	11066
5.	GOA	564	111	1	0	76	752
6.	GUJARAT	0	0	0	0	0	0
7.	HARYANA	170	12	0	0	0	182
8.	HIMACHAL PRADESH	500	40	1	1	15	557
9.	JAMMU & KASHMIR	320	31	0	0	0	351
10.	KARNATAKA	27762	881	45	54	3606	32348
11.	KERALA	7806	2736	9	5	708	11264
12.	MADHYA PRADESH	133236	48815	519	70	6235	188875
13.	MAHARASHTRA	0	0	0	0	0	0
14.	MANIPUR	9	11	0	0	0	20
15.	MEGHALAYA	11	3	0	0	1	15
16.	MIZORAM	1	11	0	0	0	12
17.	NAGALAND	9	10	0	0	0	19
18.	ORISSA	8889	2821	40	38	8816	20604
19.	PUNJAB	465	295	0	1	3	764
20.	RAJASTHAN	161	118	0	0	10	289
21.	SIKKIM	0	0	0	0	0	0
22.	TAMIL NADU	7261	2335	204	5	1772	11577
23.	TRIPURA	397	416	1	0	15	829
24.	UTTAR PRADESH	720	2481	28	9	228	3466
25.	WEST BENGAL	2877	62441	405	182	17740	83645
26.	ANDAMAN & NICOBARS	77	791	0	1	341	1210
27.	DADRA & NAGAR HAVELI	45	8	1	0	0	54
28.	DELHI	0	0	0	0	0	0
29.	PONDICHERRY	6	399	0	0	1	406
Total :		208931	143847	1291	396	42376	396841

MINOR IRRIGATION CENSUS (1993-94)

Table 5.10 Distribution of Schemes according to horse power

(in Nos.)

Sl. No.	Name of State/UTs.	According to horse power of lifting devices							Total (3 to 9)
		0-2 hp	2-4 hp	4-6 hp	6-8 hp	8-10 hp	Above 10 hp	Unspecified hp = 0	
1	2	3	4	5	6	7	8	9	10
1.	ANDHRA PRADESH	466	2435	12631	1208	1660	1026	0	19426
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0
3.	ASSAM	7	8	8418	1	5	671	0	9110
4.	BIHAR	1491	221	7612	492	211	941	98	11066
5.	GOA	123	104	279	40	94	112	0	752
6.	GUJARAT	0	0	0	0	0	0	0	0
7.	HARYANA	13	0	1	148	2	18	0	182
8.	HIMACHAL PRADESH	10	4	29	34	49	420	11	557
9.	JAMMU & KASHMIR	73	107	52	22	0	97	0	351
10.	KARNATAKA	2574	1591	11316	3217	10102	2938	610	32348
11.	KERALA	4721	2070	2904	342	564	663	0	11264
12.	MADHYA PRADESH	2734	47825	115208	6961	6998	2702	6447	188875
13.	MAHARASHTRA	0	0	0	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0	20	0	20
15.	MEGHALAYA	0	0	0	0	5	10	0	15
16.	MIZORAM	0	0	0	0	6	6	0	12
17.	NAGALAND	0	0	0	2	17	0	0	19
18.	ORISSA	2306	1049	3267	1322	3481	1558	7621	20604
19.	PUNJAB	10	188	244	277	41	4	0	764
20.	RAJASTHAN	3	3	92	69	43	75	4	289
21.	SIKKIM	0	0	0	0	0	0	0	0
22.	TAMIL NADU	422	324	7701	946	151	120	1913	11577
23.	TRIPURA	2	4	410	1	9	403	0	829
24.	UTTAR PRADESH	146	25	270	2104	556	357	8	3466
25.	WEST BENGAL	2847	12434	62737	1438	550	3639	0	83645
26.	ANDAMAN & NICOBARS	78	1	785	4	0	0	342	1210
27.	DADRA & NAGAR HAVELI	1	0	9	1	22	21	0	54
28.	DELHI	0	0	0	0	0	0	0	0
29.	PONDICHERRY	0	0	400	0	0	6	0	406
Total :		18027	68393	234365	18629	24566	15807	17054	396841

Table 5.11 Schemes in the command of Major/Medium projects and average pumping hours

MINOR IRRIGATION CENSUS(1993-94)											
(in Nos.)											
Sl. No.	Name of State/UTs.	Location of Schemes			According to Average Pumping Hours during peak season						
		On the Maj/Med	Outside Command	Total (3 + 4)	0-4 hrs	4-8 hrs	8-12 hrs	12-16 hrs	16-20 hrs	20-24 hrs	Total (6 to 11)
1	2	3	4	5	6	7	8	9	10	11	12
1.	ANDHRA PRADESH	3159	16267	19426	5421	8681	4218	735	281	90	19426
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0	0	0
3.	ASSAM	0	9110	9110	4734	4181	192	3	0	0	9110
4.	BIHAR	783	10283	11066	6434	3315	1130	114	50	23	11066
5.	GOA	91	661	752	423	294	27	5	3	0	752
6.	GUJARAT	0	0	0	0	0	0	0	0	0	0
7.	HARYANA	12	170	182	23	157	2	0	0	0	182
8.	HIMACHAL PRADESH	8	549	557	173	206	55	68	32	23	557
9.	JAMMU & KASHMIR	83	268	351	0	180	0	0	0	0	180
10.	KARNATAKA	6992	25356	32348	10810	14114	4443	919	1143	919	32348
11.	KERALA	1144	10120	11264	7958	2637	455	101	81	32	11264
12.	MADHYA PRADESH	4751	184124	188875	58461	78463	36764	9436	4767	984	188875
13.	MAHARASHTRA	0	0	0	0	0	0	0	0	0	0
14.	MANIPUR	0	20	20	0	7	9	3	1	0	20
15.	MEGHALAYA	1	14	15	7	8	0	0	0	0	15
16.	MIZORAM	0	12	12	2	10	0	0	0	0	12
17.	NAGALAND	0	19	19	1	16	2	0	0	0	19
18.	ORISSA	1802	18802	20604	13688	5549	995	220	136	16	20604
19.	PUNJAB	133	631	764	31	293	319	91	6	24	764
20.	RAJASTHAN	1	288	289	49	129	62	10	26	13	289
21.	SIKKIM	0	0	0	0	0	0	0	0	0	0
22.	TAMIL NADU	2922	8655	11577	6245	4981	208	72	61	10	11577
23.	TRIPURA	5	824	829	295	410	106	14	4	0	829
24.	UTTAR PRADESH	1106	2360	3466	1304	1384	463	114	77	124	3466
25.	WEST BENGAL	16991	66654	83645	32010	29084	18796	2896	859	0	83645
26.	ANDAMAN & NICOBARS	1	1209	1210	1208	1	0	0	1	0	1210
27.	DADRA & NAGAR HAVELI	0	54	54	18	21	14	1	0	0	54
28.	DELHI	0	0	0	0	0	0	0	0	0	0
29.	PONDICHERRY	0	406	406	0	372	34	0	0	0	406
Total :		39985	356856	396841	149295	154493	68294	14802	7528	2258	396670

MINOR IRRIGATION CENSUS (1993-94)

Table 5.12 Average length of Water Conveyance Channel

(in Mts.)						
Sl. No.	Name of State/UTs.	Total Number of Schemes	Average length of channels			
			Pucca Channel	Kuccha Channel	Under gr. Channel	Total (4+5+6)
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	19426	87	303	78	468
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	9110	429	469	13	911
4.	BIHAR	11066	126	605	604	1335
5.	GOA	752	100	136	78	314
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	182	68	118	0	186
8.	HIMACHAL PRADESH	557	456	323	479	1258
9.	JAMMU & KASHMIR	351	236	273	3	512
10.	KARNATAKA	32348	237	129	105	471
11.	KERALA	11264	305	275	78	658
12.	MADHYA PRADESH	188875	6	65	45	116
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	20	103	1238	0	1341
15.	MEGHALAYA	15	148	346	17	511
16.	MIZORAM	12	443	97	0	540
17.	NAGALAND	19	0	33	0	33
18.	ORISSA	20604	59	87	91	237
19.	PUNJAB	764	96	259	18	373
20.	RAJASTHAN	289	47	451	384	882
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	11577	69	67	18	154
23.	TRIPURA	829	156	277	1726	2159
24.	UTTAR PRADESH	3466	64	128	22	214
25.	WEST BENGAL	83645	30	206	684	920
26.	ANDAMAN & NICOBARS	1210	0	3	0	3
27.	DADRA & NAGAR HAVELI	54	112	268	87	467
28.	DELHI	0	0	0	0	0
29.	PONDICHERRY	406	157	7	0	164
Total :		396841	3534	6163	4530	14227

MINOR IRRIGATION CENSUS(1993-94)

Table 5.13 Culturable Command Area and Potential Created

(in Ha.)							
Sl. No.	Name of State/UTs.	Culturable Command Area	Irrigation Potential Created				Total
			Kharif	Rabi	Perennial	Others	
1	2	3	4	5	6	7	8
1.	ANDHRA PRADESH	149119	123449	61750	2497	459	188155
2.	ARUNACHAL PRADESH	0	0	0	0	0	0
3.	ASSAM	109363	92052	54696	150	1842	148740
4.	BIHAR	83798	58558	50587	2956	6634	118735
5.	GOA	4137	13	491	3305	354	4163
6.	GUJARAT	0	0	0	0	0	0
7.	HARYANA	712	712	712	0	0	1424
8.	HIMACHAL PRADESH	9860	8088	8860	215	76	17239
9.	JAMMU & KASHMIR	33188	29239	5330	0	0	34569
10.	KARNATAKA	105888	73985	35566	19793	8479	137823
11.	KERALA	64090	31807	39223	17592	11312	99934
12.	MADHYA PRADESH	646664	162949	689038	7267	13832	873086
13.	MAHARASHTRA	0	0	0	0	0	0
14.	MANIPUR	2432	1235	1596	0	619	3450
15.	MEGHALAYA	2248	2189	825	0	0	3014
16.	MIZORAM	160	93	67	0	0	160
17.	NAGALAND	293	187	106	0	0	293
18.	ORISSA	194662	143385	130625	4878	4412	283300
19.	PUNJAB	4961	5746	6191	25	115	12077
20.	RAJASTHAN	10451	170	10328	2	174	10674
21.	SIKKIM	0	0	0	0	0	0
22.	TAMIL NADU	21492	12124	7669	2022	4578	26393
23.	TRIPURA	20198	11289	12552	808	1530	26179
24.	UTTAR PRADESH	33583	19334	23045	2081	1555	46015
25.	WEST BENGAL	352936	206144	194361	16883	79294	496682
26.	ANDAMAN & NICOBARS	1835	908	638	434	24	2004
27.	DADRA & NAGAR HAVELI	545	318	196	43	13	570
28.	DELHI	0	0	0	0	0	0
29.	PONDICHERRY	330	3	6	0	324	333
Total :		1852945	983977	1334458	80951	135626	2535012

MINOR IRRIGATION CENSUS (1993-94)

Table 5.14 Irrigation Potential Utilised

(in Ha.)						
Sl. No.	Name of State/UTs.	Actual Area Irrigated during 1993-94				
		Kharif	Rabi	Perennial	Others	Total
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	85926	47980	2523	391	136820
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	31156	17845	63	608	49672
4.	BIHAR	23475	18833	788	724	43820
5.	GOA	11	410	2969	315	3705
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	712	712	0	0	1424
8.	HIMACHAL PRADESH	5799	6992	160	21	12972
9.	JAMMU & KASHMIR	27707	3972	0	0	31679
10.	KARNATAKA	54470	19947	17572	6390	98379
11.	KERALA	29615	36373	17272	9352	92612
12.	MADHYA PRADESH	50179	548460	3647	535	602821
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	725	951	0	373	2049
15.	MEGHALAYA	806	335	0	0	1141
16.	MIZORAM	93	67	0	0	160
17.	NAGALAND	137	75	0	0	212
18.	ORISSA	49015	59712	3505	308	112540
19.	PUNJAB	4134	4513	17	109	8773
20.	RAJASTHAN	119	8518	1	157	8795
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	9428	6330	1444	511	17713
23.	TRIPURA	9029	9644	611	1088	20372
24.	UTTAR PRADESH	16314	19879	1120	612	37925
25.	WEST BENGAL	90303	136789	10816	48598	286506
26.	ANDAMAN & NICOBARS	477	356	255	11	1099
27.	DADRA & NAGAR HAVELI	299	167	41	10	517
28.	DELHI	0	0	0	0	0
29.	PONDICHERRY	0	6	0	324	330
Total :		489929	948866	62804	70437	1572036

MINOR IRRIGATION CENSUS (1993-94)

Table 5.15 Irrigation through supplementary sources

(in Ha.)						
Sl. No.	Name of State/UTs.	Supplementary Irrigation in 1993-94				
		Kharif	Rabi	Perennial	Others	Total
1	2	3	4	5	6	7
1.	ANDHRA PRADESH	13056	4741	465	43	18305
2.	ARUNACHAL PRADESH	0	0	0	0	0
3.	ASSAM	0	0	0	0	0
4.	BIHAR	3152	1408	51	37	4648
5.	GOA	0	27	502	40	569
6.	GUJARAT	0	0	0	0	0
7.	HARYANA	35	35	0	0	70
8.	HIMACHAL PRADESH	0	0	0	0	0
9.	JAMMU & KASHMIR	1740	335	0	0	2075
10.	KARNATAKA	8213	2973	1868	1096	14150
11.	KERALA	1899	2984	1170	1375	7428
12.	MADHYA PRADESH	5024	8158	5	14	13201
13.	MAHARASHTRA	0	0	0	0	0
14.	MANIPUR	0	0	0	0	0
15.	MEGHALAYA	0	0	0	1	1
16.	MIZORAM	0	0	0	0	0
17.	NAGALAND	0	0	0	0	0
18.	ORISSA	3071	1064	1841	19	5995
19.	PUNJAB	1481	1504	12	74	3071
20.	RAJASTHAN	0	4	0	0	4
21.	SIKKIM	0	0	0	0	0
22.	TAMIL NADU	5096	2412	791	196	8495
23.	TRIPURA	0	0	0	0	0
24.	UTTAR PRADESH	3756	4608	141	199	8704
25.	WEST BENGAL	4122	4464	478	1340	10404
26.	ANDAMAN & NICOBARS	0	0	0	0	0
27.	DADRA & NAGAR HAVELI	0	0	0	0	0
28.	DELHI	0	0	0	0	0
29.	PONDICHERRY	0	0	0	0	0
Total :		50645	34717	7324	4434	97120

MINOR IRRIGATION CENSUS (1993-94)

Table 5.16 Schemes according to the constraints

(in Nos.)											
Sl. No.	Name of State/UTs.	Total No. of Schemes in use	No. of Schemes with no cons't	Constraints in utilisation of Irrigation Potential						Total (5 to 10)	Grand Total (4 + 11)
				Power in-adequate	Mechanical Break down	Less Water Discharge	Storage Siltation	Channel Break Down	Other Reason		
1	2	3	4	5	6	7	8	9	10	11	12
1.	ANDHRA PRADESH	18812	13584	1188	183	2803	1054	0	0	5228	18812
2.	ARUNACHAL PRADESH	0	0	0	0	0	0	0	0	0	0
3.	ASSAM	7564	0	183	1005	1264	153	93	4866	7564	7564
4.	BIHAR	9031	400	529	379	3209	3007	76	1431	8631	9031
5.	GOA	746	0	89	10	40	165	19	423	746	746
6.	GUJARAT	0	0	0	0	0	0	0	0	0	0
7.	HARYANA	182	0	24	3	0	155	0	0	182	182
8.	HIMACHAL PRADESH	536	331	10	18	23	56	5	93	205	536
9.	JAMMU & KASHMIR	325	0	0	0	0	0	0	0	0	0
10.	KARNATAKA	29506	14266	11218	720	1753	466	137	946	15240	29506
11.	KERALA	11253	0	328	123	1547	4797	39	4419	11253	11253
12.	MADHYA PRADESH	186928	41880	3779	779	34383	82457	287	23363	145048	186928
13.	MAHARASHTRA	0	0	0	0	0	0	0	0	0	0
14.	MANIPUR	20	0	0	0	0	0	0	20	20	20
15.	MEGHALAYA	8	0	4	0	1	2	0	1	8	8
16.	MIZORAM	12	12	0	0	0	0	0	0	0	12
17.	NAGALAND	19	0	1	0	0	0	0	18	19	19
18.	ORISSA	18197	2	1334	574	1263	6500	73	8451	18195	18197
19.	PUNJAB	764	0	548	0	0	209	0	7	764	764
20.	RAJASTHAN	280	258	12	1	9	0	0	0	22	280
21.	SIKKIM	0	0	0	0	0	0	0	0	0	0
22.	TAMIL NADU	8743	6	128	5	317	4541	3	3743	8737	8743
23.	TRIPURA	800	246	90	105	134	47	44	134	554	800
24.	UTTAR PRADESH	3188	50	488	198	553	1081	240	578	3138	3188
25.	WEST BENGAL	76301	0	3094	1062	7381	32583	1191	30990	76301	76301
26.	ANDAMAN & NICOBARS	942	0	4	26	261	86	13	552	942	942
27.	DADRA & NAGAR HAVELI	53	53	0	0	0	0	0	0	0	53
28.	DELHI	0	0	0	0	0	0	0	0	0	0
29.	PONDICHERRY	405	405	0	0	0	0	0	0	0	405
Total :		374615	71493	23051	5191	54941	137359	2220	80035	302797	374290