

INTRODUCTION

The Ground Water Cell (GWC) section was established in the department of Agriculture in the year 1971-72 on the recommendation of GOI, which recommended its creation for the welfare of the farmers. The Agriculture Department was also declared nodal department of Minor Irrigation Development in the state and it was made responsible for planning, budgeting, investigation, development and management of groundwater in the state. The GWC section is headed by the Chief Hydrologist at HQ and is under the overall control of Director of Agriculture. One Hydrologist, of HAS-I and one Water Development Specialist of HAS-II status are working at HQ who are providing all Technical and Administrative support to the Chief Hydrologist. It has ten field offices, detail is as under:-

S.No.	Office	Headed by	Jurisdiction
1.	Ambala	Hydrologist (HAS-I)	Ambala, Yamuna nagar, Panchkula
2.	Karnal	Hydrologist (HAS-I)	Karnal, Panipat
3.	Hisar	Hydrologist (HAS-I)	Hisar, Fatehabad
4.	Gurgaon	Hydrologist (HAS-I)	Gurgaon, Faridabad, Mewat, Palwal
5.	Rohtak	Hydrologist (HAS-I)	Rohtak, Sonapat, Jhajjar
6.	K.shetra	Asstt Geologist (HAS-II)	K.shetra, Kaithal
7.	Bhiwani	Asstt Geologist (HAS-II)	Bhiwani
8.	Sirsa	Asstt Geologist (HAS-II)	Sirsa
9.	Narnaul	Asstt Geologist (HAS-II)	M.garh, Rewari
10.	Jind	Asstt Geologist (HAS-II)	Jind

GWC has set up 2184 Grid Observation Points for water level observation during pre and post monsoon period every year, in addition to this one Key observation point and a peizometric tube at each block HQ in the State which are being observed monthly.

Besides this, Aquifer Performance Tests are conducted to know the behavior of aquifers, Pump Efficiency Tests are conducted to know the efficiency of pump sets for further guidance to the farmers for improvement and modification of the same, Resistivity surveys are conducted for farmers free of cost to identify and demarcate the aquifer zone for installation of shallow tubewells by them. Water Samples of Grid Observation Points/P.tubes and from the farmer's field collected by the GWC staff is analyzed in the laboratories established in the offices of GWC. Micro level surveys are conducted at block level to demarcate the potential pockets.

All the data/reports (district wise) compiled and prepared by the respective offices and send to HQ where consolidated reports/maps of the State are prepared for further submission to the State Govt as well as GOI.

ACTIVITIES

The major activities of the Ground water cell are:

- Monitoring of water level (Four times a year)
- Ground Water Assessment
- Free service to farmers.
 - Location of tubewell sites
 - Optimum tubewell depth
 - Design of tubewell assembly
 - Development of tubewell
- Micro level survey to identify potential pockets
- Construction of roof top rain water harvesting structures.
- Installation of p/tubes for strengthening of grid observation well network.
- Selection and evaluation of watershed.
- Monitoring of rainguage stations.
- Training of farmers for Minor Irrigation schemes.
- Conducting free geophysical surveys to identify and demarcate the aquifer zones for installation of Tubewells.
- Pump efficiency tests to improve the efficiency pump sets.
- Besides above activities, various thematic maps and technical reports connected with Micro Level, Hydro geological, Geophysical survey and ground water assessments are prepared.

STRATEGIES

- Mass awareness programmes to educate farmers about judicious use of water.
- Propagation for change in cropping pattern from more water intensive to less water intensive crops.

- Propagation for conjunctive use of surface and ground water in highly saline areas.
- Propagation for water conservation devices viz Sprinkler/drip/UGPL for judicious use of ground water.
- Artificial recharge in water declining areas
- Educating drillers/farmers for installation of Tubewells on scientific lines.
- Introduction of Ground water legislation to regulate and control the development of ground water (i.e. enactment of Haryana State Ground Water Management and Regulation Act).