

# Training sustainability

## -action planning-

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## 1 Introduction

1.1 The Hydrology Project (HP) has an active training history of almost three years. This is the right time to review the prospects for sustainability of training provision after the project is over. A start was made during the National Training Planning and Management Workshop in Hyderabad on 11-13 March 1999. The participating Training Co-ordinators (40) were asked to indicate why sustainability in training would be needed, what should be done and who is to take action. The compiled results of this exercise were distributed to the PCS and the World Bank, and contain a wealth of useful ideas.

1.2 However, during the follow-up, participants were not able to selectively apply the compiled results for their own Department and Central Training Institutes (CTI), and formulate specific sustainability action plans. The main reasons were that Training Co-ordinators do not consider themselves as the main or the only driving force to take such initiatives. Considering the diverse HP training menu, it is obvious that the sustainability of some (mainly data collection) courses may depend on local initiatives, but the majority of HIS training is in the hands of known and yet to be identified Central Training Institutes.

1.3 The justification for additional efforts in training sustainability was understood by all Training Co-ordinators. They recognise that continuation of HIS training is needed after the Project, even when all present training targets are fully achieved. There is a predictable need to repeat present courses and start up new types of training. There is also serious concern about the preservation of available HP training resources and the quality of training, as part of the sustainability efforts.

1.4 This proposal summarises the justification for sustainability (chapter 2), the present status of sustainability at various institutional levels (chapter 3), and provides suggested actions at these levels (chapter 4). In chapter 5, separate abbreviated sustainability records are presented for the monitoring of sustainability actions in States, Central Training Institutes and at National level.

1.5 Upon acceptance by the PCS, the Consultant will organize a series of special work meetings with related agencies to promote and explain the present sustainability planning formats and set in motion sustainability actions, as selected and defined by the agencies.

## 2 Context and justification

2.1 Professional concern for training continuity and quality, is not the most important driving force to take sustainability actions. Often, training does not find a place in annual plans and budget estimates. If job training has to compete with other agency interests that require finance, staffing inputs and management efforts, it will often be deleted from the department's agenda. HIS training will only retain its position if and when HIS itself is accepted and managed as an indispensable asset to the organisation. Only then there would be no compromise in the effort to build up a competent pool of HIS observers and specialist hydrology staff. Managers still have to attach higher expectations towards training as means to improve HIS performance and functionality. These expectations would go beyond the present preoccupation with training in terms of tabulated events and enrolment figures.

2.2 Training sustainability is needed to address ongoing staffing changes, future expansions, professional development and to keep up the quality requirements of training.

2.3 Transfers, retirements, promotions, redeployment, deputation to other works, and job rotation will remain permanent staffing features in the agencies. Training is required to (repeatedly) prepare newcomers for their HIS tasks. At the end and after the project, when the HIS will demonstrate its importance, more staff might be posted or deployed to fully cover the work involved and training targets will increase. In some States, the HP includes only part of its geographical area, and continuation of training is required to cover staff in non-HP areas. In the future, even non-HP States and non-HP central agency regions may want to adopt the HIS and would require staff training. The expected target numbers would be substantial.

2.4 Some states (Karnataka, Tamil Nadu) still have a combined cadre for various public works services, including irrigation, roads, buildings etc. Re-postings in these varied disciplines broaden, but may also dilute the expertise and skills. This fact further accentuates the need for training on a continuous and sustainable basis to newly posted staff.

2.5 Training is not the only way to communicate the agency's HIS know-how and compensate for the loss of it when staff transfers occur. Experienced staff could be involved in bilateral on-the-job training of newly posted staff. Agencies could adopt the policy that no transfer of (critical) HIS staff should take place without personal transfer of know-how sessions and a written charge-handing-over note with sections devoted to HIS tasks.

2.6 Training is an essential part of human resources development, a tool for professional improvement and work motivation. Training helps to disseminate technical developments in an efficient and effective manner. New developments in HIS may include areas such as instruments, software, modeling, procedure standardisation, updating of networks and management practice.

2.7 The HP project has created a network of trainers, faculty and institutes for specialised training. There is also a growing library of training modules that consolidate HP knowledge and set a standard for training delivery. However, without active back-up and usage, trainers may drop out, institutes may turn to other duties and training modules could become inaccessible or outdated.

### 3 Institutional levels

3.1 The Hydrological Information System (HIS) is multidisciplinary in nature. It covers five related, but separately organised domains: surface water, groundwater, water quality, hydro-meteorology and information technology. In agencies, HIS work is organized in several functional layers with their own specific training requirements. At the base, data collection often shows high staffing and training targets. Data processing takes place centrally for the SW and GW domains. Data storage and dissemination is at the top of the HIS pyramid and serves the combined interests of SW and GW, or separately as in Maharashtra and Karnataka. For generic HIS directives and data aggregation, that go beyond the administrative boundaries of the States, regional and national provisions are expected, with possible training support for the staff involved and to set general standards for training contents and implementation.

3.2 The variety of HP training needs in different professional domains and institutional levels, can not be managed by one institution on its own. Sustainability efforts have to take place through various institutional channels. In this institutional environment, mutual dependency and co-operation are important. For example, it would make no sense to strengthen training supply through local or central institutes without simultaneous attention for provisions in the agencies themselves. Past HP experiences show many examples of supply-driven training initiatives that were postponed or disappointing, because client-orientation was lacking in course contents, timing, duration, costs or delivery methods. As a result, training providers and participants were frustrated, and will think twice before they restore their working relations.

3.3 In the table below, the present status of training provisions at various institutional levels are summarized.

	<b>SW</b>	<b>GW</b>
<b>Training cell</b>	-Training Co-ordinators	-Training Co-ordinators
<b>In-house training capacity</b>	-SW trainers -WQ trainers -SWDES trainers -Hydrometeorology not included -Information technology not included	-GW trainers -WQ trainers -GWDES trainers -Information technology not included
<b>Local institutes</b>	- WALMI and similar institutes - Engineering Colleges (some) - Regional IMD offices for Hydrometeorology - No provisions for WQ - Various options for information technology	- No provisions except in Maharashtra and Gujarat - No provisions for WQ - Various options for information technology
	Shared / combined provisions in Karnataka and Tamil Nadu	
<b>CTI</b>	CTU	RGI
	- Shared / combined provisions: NIH, CWPRS, CPCB, NEERI, ITRC - No provisions for training support in WQ field and laboratory staff and WQ monitoring	
<b>National forum</b>	Temporary project provisions during the HP: -National Hydrology Training Committee -Project Co-ordination Secretariate, MOWR -Project consultants -Variety of (non-HP) Universities and Research Institutes	

## 4 Issues and recommended actions

### Agency level training cells

4.1 Irrespective of the decision to create capacity for in-house training delivery, all agencies will require a training cell. This cell is to prepare an articulate training policy, training plans, adequate budgets for all HIS training at all levels, and to maintain staff training records. Training providers (local and central) are only able to function, if their clients are ready with specific training demands and financial resources for implementation. Without responsive clients, training sustainability will not emerge. A Training Cell is managed by a (part-time) Training Co-ordinator, who has easy access to management meetings to identify agency training needs, plan deliveries and keep communications going with all training providers.

4.2 In the majority of States, it was found that separate training cells in the SW and GW agencies is the most workable solution. With combined training co-ordination at State level, or co-ordination by external institutes, there are too many communication lines to manage.

4.3 The Training Co-ordinator should have sufficient authority. He should preferably be selected at Joint-Secretary or Chief Engineer level to expedite the process of training activities and give training its intended recognition. He would also have delegated powers to financially sanction courses and approve nominations.

4.4 Agency training cells need to be fully informed on HIS staffing plans and ad hoc changes to specify training demands. Co-ordinators prepare personal learning paths based on functional and personal performance assessments. Individual training needs are aggregated in annual training plans, indicating the volume of training for in-house, local and central delivery. Training budgets are estimated on the basis of actual cost to implement a training plan. The training cells also keep track of training progress in terms of overall quantitative achievements and completion of personal learning paths.

4.5 Training cells undertake their own training evaluations and impact assessments. These short and long term assessments take place in the agencies as needed to judge retention and application of newly learned skills and, perhaps, decide on the need for additional training

### In-house training capacity

4.6 Many organisations prefer in-house training arrangements over out-sourcing. In-house training is cheap and a far more flexible option for training of data collection staff at stations, laboratories and data entry units. Some organisations co-operate with established local training institutes to host in-house training. Agencies that opt for in-house training have as yet to ensure continuity of in-house resources. On various occasions, the Consultant noticed unresolved issues, that are not always properly addressed.

4.7 In-house trainers are not always selected from staff experienced and interested enough to become a trainer. Being a HIS trainer is not an openly recognised and special role. For example, recognition would include direct involvement in course design and being allowed to spend sufficient time for preparations. However, this is not granted, or very reluctantly.

4.8 Trainers do their work on top of other duties and it is logical to pursue administrative ways to provide in-house trainers a honorarium for the extra work done. Rates of Rs 150 for 60-90 minutes of training appears to be feasible and is already applied in some agencies. Sometimes, this honorarium is only offered, if courses are done at WALMI or other recognised training institutes. It is necessary to allow these honorariums for all courses at sites, offices, laboratories etc., because not all courses can be done in WALMIs.

4.9 Generally, practical in-house resources for training are not made available. In the past, very motivated trainers were willing to spend their own money on a few slides, photocopies and travel expenses, which is a poor base for sustainability. A petty cash for training consumables, photocopier, training modules, trainer kits, exercise equipment, transport to demo sites etc. need to become readily available.

4.10 Transfers out of the HP also happen to trainers. Some drop out at their own request. Preferably, in-house trainers should be posted for a minimum of two, three years. The total strength of in-house trainers should be in line with the expected volume of training. Fresh batches of trainers may be arranged with CTU and RGI. To some extent, pooling of trainers may compensate for low trainer capacity, but the team spirit to do so seems to be lacking.

4.11 Pooling of training resources is also needed to share experience and individually prepared training materials, such as translations of handouts in local languages, creative overhead sheets etc. Training co-ordinators are expected to facilitate regular training team meeting, and stimulate sharing of training materials, experiences and evaluation results. In the agencies, individual trainers have no say and can not survive, but as a team they can.

4.12 Active trainers are good candidates to pick-up new advancements at CTIs (refresher courses, advanced training) and communicate the same through in-house training. Current good examples include CGWB's effort to nominate existing trainers for subsequent Training of Trainers programmes. Also, the majority of SW trainers for ToT-3 at CWPRS were selected by name from the existing pool of in-house trainers. The learning paths of all HP trainers who will play a role in the future, have as yet to be spelled out.

### **Local training institutes**

4.13 An agency that decides not to create in-house capacity for regular HIS staff training, would locally out-source training development and deliveries. In such cases, the agency will still require a training co-ordination point (training cell) to specify training demands and subcontracts, whereas the selected local training provider(s) are to develop the resources required to meet these demands. As part of the deal, the client agency could re-allocate selected SAR training budget components earmarked for training development and equipment. Hosting of training courses, initiated and arranged by the agency, is not considered as out-sourcing.

4.14 Out-sourcing a training course does not make it sustainable. It would depend on the institute whether they stay committed to HIS, now and beyond the project period, and accordingly develop their capabilities and resources.

4.15 Various surface water hydrometry and hydro-meteorology training may be incorporated in regular WALMI/WALAMTARI/IMTI programmes. This would logically fit in their existing irrigation-oriented training curricula. Appointment of additional faculty in hydrology may be needed. SW in-house trainers are not always used for design and delivery of courses at WALMI, which is a waste of resources.

4.16 Continuation of training for rainfall observers and full climatic station supervisors, will depend on IMD's willingness and efforts to keep training locations close to the sites, limit course contents to actual job tasks, further reduce the cost and, perhaps, gradually hand over course delivery to in-house SW trainers or local institutes. IMD could also think of waiving course fees for a fixed number of participants per year. With the present targets achieved under the project, future requirements in the agencies would be reasonably low.

4.17 At present, only a few States have provisions for local GW training. In Tamil Nadu, resources for SW and GW are pooled and shared for both domains. In Nasik (Maharashtra), a dedicated institute for GW training is under completion. A similar GW Management & Training Institute is being planned in Gujarat.

4.18 Local institutes for WQ training are not included in the project. Most ongoing WQ sampling and laboratory training is and can always be organised as in-house training. However, as back-up support for in-house trainers and to undertake more advanced training sessions, local laboratories with training interest are yet to be identified and formally included in the project. The State Pollution Control Boards in (some of) the States and the Central Pollution Control Board would be good options.

4.19 Computer training (basic skills, MSOffice and office network maintenance) is already frequently out-sourced to local computer training institutes. These are available throughout India. The practice of in-office and on-the-job coaching has yet to be established and included in the terms of reference of the training contracts. To ease post-training coaching, IT service contracts, and travel arrangements for the participants, it would be better to have one IT training institute contracted per Division, rather than one per State.

4.20 Some states (Karnataka) provide refresher course for new incumbents. Often, these courses pay little or no attention to hydrology. As refresher and induction training is a recognized concept, it would be logical to include HIS topics in the curriculum and thus give these aspects a more recognized place.

### **Central Training Institutes**

4.21 Continuous involvement of Central Training Institutes remains essential for advanced training in special instruments, data processing, data communication, storage, data applications and HIS management in general. These categories of training are impossible to develop and deliver, on a decentralised basis, by local training institutes. Decentralised institutionalisation would also make it difficult to supervise deliveries and enforce inclusion of new standards, equipment, procedures and policies. All CTIs in the project have as yet to resume their full, designated role. Therefore, it is premature to draw definite conclusions on their ability to do so.

4.22 The **Central Training Unit (CTU)** of CWC in Pune, is to develop into the National Water Academy (NWA). The mandate and commitment to HIS training of the NWA is unclear. The present faculty is limited in number and fully occupied with ongoing courses, including induction training for CWC staff. Support to the HP includes regular Training of Trainers courses and computer skills training. The faculty is highly motivated and very eager to participate in new, more advanced types of training. SWDES and HYMOS training are on the agenda. For this purpose, teaming up with the NIH in Roorkee will take place. CTU's delivery commitments for HYMOS training are substantial and will be focused on CWC and Maharashtra state. HIS training need not to be perceived as additional training (and burden) on the CTU's agenda. It would be logical to incorporate standard HIS topics in the ongoing induction programmes.

4.23 The facilities of the **Rajiv Gandhi Groundwater Research and Training Institute (RGI)** in Raipur are being completed. This includes provisions for water quality research and training. Progress is slow. It is difficult to attract faculty, as Raipur is not an attractive place of posting. RGI has limited and dedicated staff available.

RGI conducts induction training courses for CGWB staff. As in the CTU, the HIS training need not to be perceived as additional training (and burden) on the RGI agenda. It would be logical to incorporate standard HIS topics in the ongoing induction programmes.

Training of in-house GW trainers is adopted as part of the annual curriculum. The formal mandate of RGI as future centre of excellence is as yet not consistently applied. The authority to act independently is lacking and decisions in training matters are often confused in the effort to reach consensus between RGI and the CGWB offices in Faridabad and New Delhi. Teaming up between RGI faculty and HP consultants is also a slow process. It is further resented by RGI that the GoN initiative to start a professional twinning project with counterpart institutes in The Netherlands did not materialize in 1998.

4.24 The **National Institute of Hydrology (NIH)** in Roorkee is a premier institute for hydrology research and development in India. NIH has standing collaboration programmes with other national and international organisations. There are well equipped regional centres, responding to the specific needs of different agro-climatic zones. The regional NIH centres of Belgaum, Kakinada and Sagar are located in the Hydrology Project area.

Specific training involvement in HP includes HYMOS data processing staff training and advanced (postgraduate) courses. It is likely that in the post-HP era, NIH will continue its role in postgraduate training and keep track of new developments in HIS. To what extent the HYMOS staff training and coaching will get a permanent place on the institute's and faculties' agendas, remains to be seen.

In the process of consolidating HIS training, communication links between NIH and the client agencies and Training Coordinators have to be intensified to ensure demand-based training. Linkages with other CTIs also deserve attention. In the coming two years, it will be a challenge to keep the surface and groundwater training mandate of NIH complementary and competitive with those of the CTU and RGI.

4.25 The **Central Water & Power Research Station (CW&PRS)** in Kharakwasla, Pune, is one of the oldest research institutions in the world. Established in 1916, it has been conducting research and development studies in the field of irrigation, hydropower, navigation, harbours etc. Within the context of the HP, CWPRS is responsible for providing training of trainers courses for bank operated cable ways, sediment sampling and water level recorders, and direct training on acoustic Doppler current profilers (ADCP) and bathymetric surveying. Commitments beyond the HP project period are unclear and need to include staff coaching, as part of the services.

4.26 In the area of **water quality training**, no institute was identified in the SAR. During the last three years, co-operation arrangements were made with national level institutions for training on advanced chemical equipment: Central Pollution Control Board in New Delhi (CPCB), Industrial Toxicology Research Centre in Lucknow (ITRC), National Environmental Engineering Research Institute in Nagpur (NEERI), and the Environmental Protection Training & Research Institute in Hyderabad (EPTRI).

For support to existing in-house WQ trainers, there are no provisions. It will be essential to continue and firm up working contacts with CPCB, ITRC and NEERI, and expand the WQ training network with State Pollution Control Boards. CPCB assumes importance in the WQ analytical quality control programme and is familiar with the HIS.

4.27 For all CTIs with a designated and complementary role in HIS training, a standard series of indicators applies to start and monitor their (institutional) sustainability. (ref. sustainability formats on next pages). These indicators relate to the institute's position in the sector, improved client-orientation and the provision of adequate training resources to meet the clients' training quantity and quality requirements

### **National provisions**

4.28 Training cells, local training providers and CTIs will need support at national level to varying degrees. This could be for getting mandates, authorizations and professional support. HIS and training management information available in the training cells is likely to be inadequate and their access to information elsewhere will also be limited. In the maze of official hierarchy, not much authority and pro-active attitude can be expected at agency levels. National level direction from a central ministry would be essential, as illustrated by the decision making practices applied during the HP project.

4.29 Stagnation in decision making and the need for collaboration are also expected in local and central training institutes. National directives will help arranging financial provisions, give recognition to various types of training courses and set quality standards. National Training Policy aims at just that. Related documents on the National Training Policy are to be collected by the Consultant, distributed and reviewed in work meetings.

4.30 The (existing) National Hydrology Training Committee (NHTC) may serve as permanent forum to match agency demands with training supply in the country. The post-project composition of the NHTC and its mandate are yet to be specified. Members would include universities and research institutes with a demonstrated commitment to HIS training.

4.31 High on the NHTC's agenda would be the review of existing induction training and university curricula with respect to HIS and HIS related topics. This would ensure that future generations of hydrologists require less in-service training to master HIS skills and knowledge.

Currently, induction courses are arranged in CWC, CGWB, Maharashtra; and a shorter version called orientation courses in Karnataka. During consultants discussion with state authorities it was understood that there is no regular annual staff intake, in fact there has been no recruitment for several years as such possibility of arranging induction courses is bleak. Where such is the position the, possibility of deputing staff in Central agency-run-induction course may be pursued. HIS topics should remain a component of the courses.

4.32 The NHTC should have a firm link with sector policy and research institutes, to make sure that technical training contents, as disseminated through various training institutes, are up to date. These institutes may be united as National Hydrology Knowledge Network (NHKN). This network would act as technical, advisory forum for exchange of HIS implementation experience, standardisation matters, monitoring and management information systems, network expansion, HIS application examples and policies etc. The NHKN should include influential delegates of, for example, the Indian Association of Hydrologists, Institution of Engineers etc.

## 5 Action planning formats

### Application

Sustainability actions will vary per agency, state and institute. The Consultant will facilitate a series of work meetings, to further promote attention for training sustainability and assist to define concrete actions. These work meetings will take place in a step-by-step decision making process and will be completed before March 2000. For each step taken, a standard action planning format will be used. These formats are provided on the next pages and relate to the following steps:

**Step 1** (See planning format 1, one page per domain.) Agencies list the types of training they wish to continue after the project and estimate expected enrolment figures (targets). They decide on the providers for selected courses: in-house, local or CTI. They also estimate the budget required to implement a typical annual training programme. This planning information is needed to discuss whether intended sustainability actions are reasonably in balance with the volume and variety of future training.

**Step 2** (See planning format 2, two pages.) Agencies take stock of the present status of training sustainability at the level of training co-ordination and in-house capacity. Performance indicators for in-house capacity building would only be specified if an agency decides, during Step 1, to continue with some training through in-house provisions. To complete this step, an overview of past and future actions towards training quality and management will be made (See second page of format 2).

**Step 3** Agencies confirm with selected local training institutes whether they are willing and in the position to supply requested training on a permanent basis. Collaboration agreements are made in writing.

**Step 4** PCS aggregates all agency training requirements marked for CTIs (Step 1), and approaches the CTIs with the request to confirm their future commitments. The CTIs will also have to specify their internal performance indicators (See planning format 3). In addition, they indicate to what extent they have been or will be active in training quality and management decisions (second page of format 3).

**Step 5** PCS informs all agencies and CTIs on the final results of step 1 through 4, during a NHTC meeting. Compatibility, overlaps and collaboration agreements between CTIs are noted and confirmed. On the agenda will be a discussion on national level sustainability actions, as per planning format 4, and additional points emerging during the sustainability action process.

**Step 6** Annual monitoring and response to progress made at State, CTI and national levels. During the project this will take place at least two times: December 2000 and December 2001. The PCS and project Consultant play a facilitating role. Beyond the project period, the NHTC would take over this task.

**Annual training requirements after the project (States and CWC)**

1	2	3	4
HIS functions and related training	Institute	No. of trainees	Annual cost
<b>Data collection</b>			
Hydrometry for Helpers			
Hydrometry for Gauge readers / Observers			
Data collection at rainfall stations			
Data collection at full climatic stations			
Sediment sampling & equip. maintenance			
DWLR operations & maintenance			
BOCW operations & maintenance			
Data collection and instrumentation coaching			
<b>Data entry</b>			
Surface water data entry			
Data entry coaching			
<b>Data processing</b>			
Basic data processing (HYMOS 4)			
Advanced data processing (HYMOS 4)			
Hydrometeorological data processing			
GIS introduction for managers			
GIS applications for specialists			
HIS management practices			
Data processing coaching			
<b>Water quality data collection</b>			
Sampling and on-site analysis			
Basic chemistry & lab practices			
Chemistry & lab practices			
AAS operations			
UV-VIS operations			
GC operations			
Laboratory and instrumentation coaching			
<b>Water quality data entry</b>			
WQ data entry & initial validations			
WQ data entry coaching			
<b>Water quality data processing</b>			
WQ data processing & reporting			
Laboratory management			
Lab. networking & quality control			
WQ data processing coaching			
<b>Data communication and storage</b>			
HIS Data Centre management			
HIS database administration			
Computer systems management			
Data Centre coaching			
<b>Office automation and information technology</b>			
Basic computer skills			
MS Word, Excel, Access			
Office network maintenance			
IT and computer systems coaching			
<b>Other training</b>			
Training of trainers: basic skills, management			
Coaching of active trainers/faculty			
Study tours			
Postgraduate training			

**Annual training requirements after the project (States and CGWB)**

1	2	3	4
HIS functions and related training	Institute	No. of trainees	Annual cost
<b>Data collection</b>			
Groundwater data collection			
Total stations and DGPS			
DWLR data validation & handling			
Data collection and instrumentation coaching			
<b>Data entry</b>			
Groundwater data entry			
Data entry coaching			
<b>Data processing</b>			
Basic GW software			
Advanced data processing			
GIS introduction for managers			
GIS applications for specialists			
HIS management practices			
Data processing coaching			
<b>Water quality data collection</b>			
Sampling and on-site analysis			
Basic chemistry & lab practices			
Chemistry & lab practices			
AAS operation			
UV-VIS operation			
GC operation			
Laboratory and instrumentation coaching			
<b>Water quality data entry</b>			
WQ data entry & initial validations			
WQ data entry coaching			
<b>Water quality data processing</b>			
WQ data processing & reporting			
Laboratory management			
Lab. networking & quality control			
WQ data processing coaching			
<b>Data communication and storage</b>			
HIS Data Centre management			
HIS database administration			
Computer systems management			
Data Centre coaching			
<b>Office automation and information technology</b>			
Basic computer skills			
MS Word, Excel, Access			
Office network maintenance			
IT and computer systems coaching			
<b>Other training</b>			
Training of trainers: basic skills, management			
Coaching of active trainers/faculty			
Study tours			
Postgraduate training			

Sustainability status in agencies	Per end 1999	Actions for improvement
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**Training co-ordinator / Cell**

1	HIS training policy exists and addresses training sustainability and implementation procedures	Yes / no	
2	Training Co-ordinator appointed for SW / GW / combined	Since:	
3	Training co-ordination is at Joint-secretary / CE level	Since:	
4	Training Co-ordinator has full financial and nomination authority for training matters	Yes / no	
5	Training Co-ordinator maintains library of up to date HIS training reference documents	Yes / no	

**Training development and planning**

1	Personalised HIS staffing plan available with TC for training planning purposes	Yes / no	
2	Learning paths for existing and new HIS staff specified for ___ persons out of ___	___ %	
3	Training calendar / plan for current financial year prepared for in-house and external training	Yes / no	
4	Locally and centrally out-sourced training confirmed in agreements, contracts etc.	Yes / no	
5	Training budget incorporated in overall annual budget of Department	Amount: Rs. _____ = ___ % of actual cost	
6	Course evaluations are actively analysed and corrective actions defined	(Highlights on next page)	
7	Training coverage is noted in personal learning paths for ___ persons out of ___	___ %	
8	Training impact is assessed at organisational level and emerging training needs are defined in type and volume	Yes / no (Highlights on next page)	
9	Progress report on achievements, impact and future training plans prepared	Submitted to:	

**In-house trainers and resources**

1	Position of in-house trainers confirmed in writing for ___ out of ___ trainers.	___ %	
2	In-house trainers receive honorarium for training activities	Rs/hour: _____ Maximum/year: _____	
3	Trainer strength kept at level required to achieve annual targets.	___ trainers trained ___ % active ___ additionally required	
4	In-house training resources are accessible: modules, kits, equipment, room, sites	Yes / no	
5	Training team meets regularly for review, evaluation and planning purposes	___ meetings/quarter (Highlights on next page)	



Sustainability status in training institutes	Per end 1999	Actions for improvement
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### Position in sector

1.	Has recognised and clear training mandate in HIS sector for _____		
2.	Training policy covers short and long term HIS related training strategy		
3.	Organisation structure shows HIS unit and has dedicated co-ordinator		
4.	HIS topics are included in regular induction training		
5.	Course certification links up with professional careers in HIS agencies		
6.	Has clear picture of HIS training needs and volumes of all HIS agencies in India		

### Training development and planning

1.	Maintains consultations with client agencies to prepare annual plan		
2.	Annual plan reflects HIS training needs and volumes in India		
3.	Maintains consultations with HIS agencies for detailed training design (TNA)		
4.	Course evaluations are actively analysed and corrective actions taken	(Highlights on next page)	
5.	Maintains consultations with HIS client agencies on training impact at job level		
6.	HIS training team meets regularly for review and planning purposes	_____ meetings/quarter (Highlights on next page)	

### Capacity and resources

1.	Has qualified faculty on payroll for specific HIS disciplines		
2.	Has reference library with up-to-date HIS documents and HP training modules		
3.	Maintains links with other institutes and resource persons to keep HIS know-how updated		
4.	Teams up with institutes and resource persons to respond to high demands		
5.	Has running budget for HIS training development, consumables, equipment		
6.	Has qualified training support staff: DTP, translators etc.		
7.	Has (access to) facilities for DTP, reproduction, classrooms, training/demo equipment, soft/hardware, board & lodging		



**National level**

	<b>Key actions</b>	<b>Dec 99</b>	<b>Dec 00</b>	<b>Dec 01</b>
	National Hydrology Training Committee (NHTC) established as post HP forum			
	Training modules incorporate latest HIS research findings, standards, policies			
	HIS-MIS used as resource to identify emerging training needs.			
	Annual update and distribution of HIS training catalogue			
	Annual update and distribution of HIS trainers and faculty directory			
	Annual update and distribution of HIS sites and offices catalogue			
	Networking with universities and research centres			

