

CHAPTER – 3

ORGANIZATION

As envisaged in the various Acts, the State Pollution Control Boards (SPCBs) are required to have a technically competent Board of Members, a well-qualified core group of technicians and administrators who are to evaluate, monitor and control pollution at the field level and a network of field offices that facilitates such monitoring and control. This chapter attempts to understand the existing organizational structure of 25 SPCBs. It probes whether the composition of State Boards is in consonance with its requirements spelt out in the Water Act. In the absence of any prescribed norm for the staffing pattern of the State Boards, an analysis of inter-SPCB variations in the relevant ratios and parameters is made.

Constitution of the State Boards

3.2.1 SPCBs are corporate bodies, having perpetual succession and a common seal with powers to perform the functions entrusted to it through successive enactments. No State Board exists for Union Territories, where the Central Board itself exercises the functions of a State Board or delegates all or any of its powers to such persons or body of persons as the Central Government may specify. The Water Act specifies the composition of the SPCBs, the essential characteristics of which are detailed below:

Chairman and Member Secretary

3.2.2 Each State Board shall be constituted with a Chairman, Member Secretary and other members. The Chairman of a State Board shall be a person having **special knowledge or practical experience in respect of matters relating to environmental protection or a person having knowledge and experience in administering institutions** dealing with the matters aforesaid. He shall be nominated by the State Government for a **term of three years** and may be either whole time or part-time, as the State Government may think fit. Member-Secretary, a full-time member, shall be a person possessing **qualifications, knowledge and experience of scientific, engineering or management aspects of pollution control**. The Chairman and Member-Secretary shall exercise such powers and perform such duties as may be prescribed or delegated to them by the Board.

Other Members

3.2.3 Other members shall include: (a) such number of officials, not exceeding five, to be nominated by the concerned State Government **to represent that Government**; (b) such number of persons, not exceeding five, to be nominated by the State Government from among the members of **the local authorities functioning within the State**; (c) such number of non-officials, not exceeding three to be nominated by the State Government **to represent the interests of agriculture, fishery, industry, trade or any other interest which, in the opinion of the State Government, ought to be represented**; and (d) two persons to be

nominated by the State Government to represent the **companies or corporations owned, controlled or managed by it**. Members, other than the Member-Secretary, shall hold office for a **term of three years**. A member shall, notwithstanding the expiry of his term, continue to hold office until his successor takes over. The term of office of a member shall come to an end as soon as he ceases to hold the office by virtue of which he was nominated.

Analysis of the composition of Boards

3.2.4 The Water Act lays down the broad composition of the State Boards; but it does not specify the qualifications to be possessed by the members of the Boards. Though the broad composition of the State Boards in general seems to be in consonance with the norms specified in the Water Act, some disturbing facts stand out.

Table3.1: Composition of some State Boards.

State	Total number of members	No. of members whose qualifications (professional status) are known	No. of civil servants	No. of other non-technical members	No of technical members
1	2	3	4	5	6
Andhra Pradesh	15	15	9	4	2
Assam	17	17	5	4	8
Bihar	11	6	0	0	6
Goa	15	15	3	2	10
Gujarat	16	8	5	0	3
Himachal	8	8	8	0	0
Jammu Kashmir	8	8	6	1	1
Karnataka	16	16	7	3	6
Kerala	17	7	2	0	5
Madhya	14	9	5	0	4
Maharashtra	13	10	6	2	2
Manipur	11	10	5	1	4
Punjab	15	15	9	3	3
Sikkim	14	13	8	5	0
Tamil Nadu	10	10	7	0	3
Tripura	13	13	4	4	5
West Bengal	17	17	5	6	6

3.2.5 Table 3.1 suggests that the presence of non-technical people is predominant in the composition of some SPCBs. For instance, Himachal Pradesh SPCB in which the post of Chairman is vacant has all its 8 members from bureaucracy. In the case of Andhra Pradesh SPCB, 9 members including Member Secretary and Chairman, are bureaucrats and another 3 are non-technical. The Sikkim State Board, which is without a chairman, has 14 members out of whom 8 are from bureaucracy, 4 are

panchayat members and one is a retired teacher. From what is known of the professional status of the members, the case is more or less the same with the State Boards of Tamil Nadu, Punjab, Jammu & Kashmir, West Bengal and Maharashtra. However, **there are some State Boards, like those of Assam, Bihar and Goa (Karnataka, Manipur and Tripura to some extent), which have maintained a good number of technically qualified people along with generalists.** With the levels of available information, nothing can be concluded about the composition of the State Boards of Madhya Pradesh, Bihar, Kerala and Gujarat. Considering the intricate technicalities involved in the functions to be performed by these Boards, it is essential that technical persons possessing scientific knowledge about matters relating to pollution and pollution control hold an upper hand.

3.2.6 There are two categories of members – those representing local authorities and those representing interests of agriculture, industry, fisheries and trade-for whom any professional competence cannot be guaranteed. **There is a tendency among State Boards to not to fill the vacancies of members representing local authorities.** Himachal Pradesh and Manipur SPCBs do not have any member of this category, Tamil Nadu Board has only one, whereas the State Boards of Bihar, Maharashtra, Madhya Pradesh and Jammu & Kashmir have only two each.

3.2.7 Chairmen and member secretaries of different State Boards seem to have been chosen from various disciplines: bureaucracy, science and technology, environmental economics, mathematics, law and representatives of the people. They, in a majority of cases, seem to be in grip with issues of environment. **However, frequent changes of Board Chairman and other members, which amount to the absence of a sustained vision on policies and programmes for pollution control cannot be endorsed.** Tamil Nadu Board, since its inception in 1982 has had 18 Chairmen. The Karnataka Board, since 1988 has had 8 Chairmen. The Uttar Pradesh SPCB has accommodated 24 Chairmen and 10 member secretaries during the last 24 years.

Staffing Pattern of State Boards

3.3.1 The Water Act, 1974, empowers each State Board to appoint, subject to the rules made by the concerned State Government, such officers and employees whom it considers required for the effective performance of its functions. The method of recruitment & terms and conditions of their service are to be determined by the regulations made by the State Board. However, the regulations made by the State Board thereon must get the approval of the State Government. The State Board may, subject to specified limitations and conditions, delegate to any officer of the Board its powers and functions in this respect.

3.3.2 The SPCBs catering to the North Eastern States (except Assam) and Jammu & Kashmir are treated separately as a second category in this Chapter and in the Chapters to follow in view of their distinct problems and insignificant pollution potential.

3.3.3 Table 3.2 gives the staff position of the State Boards along with the number of red and orange category of polluting units to be monitored by them.

Table3.2: Staffing position of State Boards.

State	Estimated number of polluting units	Sanctioned Staff strength	Staff in position	Number of technical staff in position	Number of vacancies
1	2	3	4	5	6
Andhra Pradesh	7521	355	234	88	121
Arunachal Pradesh	*	0	0	0	0
Assam	*	204	197	93	7
Bihar	1663	277	261	171	16
Goa	248	24	13	4	11
Gujarat	7337	572	491	257	81
Haryana	2085	258	179	45	79
Himachal Pradesh	226	119	100	26	19
Jammu Kashmir	*	467	54	15	413
Karnataka	3267	725	254	146	471
Kerala	848	253	244	121	9
Madhya Pradesh	2687	541	589	255	-48
Maharashtra	9035	765	632	292	133
Manipur	*	61	13	8	48
Meghalaya	*	72	30	12	42
Mizoram	*	11	8	1	3
Orissa	1045	220	160	61	60
Punjab	3706	232	106	86	126
Rajasthan	2265	225	206	88	19
Sikkim	*	4	4	4	0
Tamil Nadu	8151	931	696	295	235
Tripura	*	9	8	6	1
Uttar Pradesh	6441	752	549	199	203
West Bengal	3414	181	143	85	38

* Not estimated.

3.3.4 The number of polluting units in a State must be one of the major determinants of the staff strength of a State Board. The other major determinant must be the geographical dispersion of pollution, which given the inadequate database, cannot be estimated. The number of polluting units in a State is approximated as the number of red and orange category of manufacturing units estimated from the Annual Survey of Industries, 1994-95. Variations in the staff position of the SPCBs can be analysed only with the help of appropriate ratios that deflate the absolute numbers with the task at hand. These ratios are presented in Table3.3.

Table 3.3: Variations in staff positions

State	(Sanctioned Staff /Number of polluting units)*100	(Staff in position/ Number of polluting units)*100	(No. of technical staff/No. of polluting units)*100	(No. of technical staff/Total number of staff)*100	(Vacant posts/Sanctioned posts)*100
1	2	3	4	5	6
Andhra Pradesh	4.72	3.11	1.17	37.61	34.08
Assam	*	*	*	47.21	3.43
Bihar	16.66	15.69	10.28	65.52	5.78
Goa	9.68	5.24	1.61	30.77	45.83
Gujarat	7.80	6.69	3.50	52.34	14.16
Haryana	12.37	8.59	2.16	25.14	30.62
Himachal Pradesh	52.65	44.25	11.50	26.00	15.97
Karnataka	22.19	7.77	4.47	57.48	64.97
Kerala	29.83	28.77	14.27	49.59	3.56
Madhya Pradesh	20.13	21.92	9.49	43.29	-8.87
Maharashtra	8.47	7.00	3.23	46.20	17.39
Orissa	21.05	15.31	5.84	38.13	27.27
Punjab	6.26	2.86	2.32	81.13	54.31
Rajasthan	9.93	9.09	3.89	42.72	8.44
Tamil Nadu	11.42	8.54	3.62	42.39	25.24
Uttar Pradesh	11.68	8.52	3.09	36.25	26.99
West Bengal	5.30	4.19	2.49	59.44	20.99
All Boards	10.73	8.10	3.70	45.69	24.46

* Not estimated

3.3.5 All the ratios presented in Table 3.3 exhibit wide variations across State Boards. The per unit staff ratios – the total staff strength of a State Board divided by the estimated number of orange and red category units in the State (S/N), and, the number of engineering and scientific staff of the State Board divided by the number of red and orange units in the State (Ses/N)– differ widely across State Boards (Table 3.3). The situation of 44 persons in position for 100 red and orange units in Himachal Pradesh can be compared with the state of having only 3 persons for 100 units in Punjab and Andhra Pradesh. More pertinent are the differences in the per unit availability of scientific and engineering staff (Table 3.3), who alone should be shouldering the task of monitoring. **It is estimated that the Andhra Pradesh Board has only 1 technical person to monitor 100 units, Goa Board has only less than 2 technical personnel for 100 units and 3 other Boards – those of West Bengal, Haryana and Punjab – have less than 3 persons to perform the same task.** The ratio (Ses/N * 100) averages to 3.8 for the first category of State Boards (excluding SPCBs of the NorthEast and J&K). 11 of these State Boards have this ratio less than 5, while those of Himachal Pradesh, Kerala and Bihar possess the ratio values in excess of 10, i.e. more than 10 scientific and engineering personnel per 100 red and orange units.

3.3.6 Non-filling of the sanctioned staff strength is one of the most important factors behind the widely varying per unit staff ratios across State Boards. The vacancy ratio

(number of vacant posts as percentage of number of sanctioned posts) averages to 22.1% for all the first category State Boards (Table 3.3). **The vacancy ratio is as high as 65% for Karnataka, 54% for Punjab, 46% for Goa and 43% in Andhra Pradesh. On the other hand, the overwhelming presence of contract employees in the Madhya Pradesh State Board made its staff in position exceed the sanctioned staff strength.** The influx of contract employees is a discomfoting feature of the staffing pattern of most of the State Boards, reported especially from Manipur, Sikkim, Kerala and Madhya Pradesh. The incumbent, who is not paid according to his qualifications and denied of standard benefits and allowances of the Government, lacks motivation and takes it as a stopgap arrangement. This precludes proper development of work culture.

3.3.7 It is learnt that **the Central Government has not laid down any norm for determining the staffing pattern of the State Boards with respect to coverage of pollution units.** Given the geographical dispersion of polluting units, the per-unit ratios would vary with variations in the financial resources of the State Boards and the freedom with they can create posts and appoint these personnel. **It is reported that the maximum pay scale to which the State Boards are entitled to create posts differs across States.** In the case of Kerala SPCB, the maximum pay to which posts can be created - Rs.1500/- fixed in 1976 had then enabled them to create posts up to the level of the environmental engineer. With the same limit remaining unrevised, the highest post that the Board can now create is only that of attender. SPCBs of Himachal Pradesh and Assam are still empowered to create posts up to the scale of Environmental Engineer. The highest (pre-revised) pay scales to which posts can be created are Rs. 4150/- and Rs.3100/- respectively in Meghalaya and Uttar Pradesh. In Sikkim and J&K the State Boards are virtually the appendages of their respective Forest Departments and the Boards have to bank on the Departments for all their staffing decisions. The State Boards of Maharashtra, U.P. and Tamil Nadu which are said to have no financial constraints in creating and filling additional posts cannot easily do so due to the condition of obtaining approvals from their respective State Governments.

3.3.8 Non-pursuit of any norm for the determination of the staffing pattern of the State Boards is further evidenced by the results presented in Statement 3.1.

Statement 3.1: Correlation between per unit staff ratios and pollution intensity

	Sanctioned staff per 100 units	Available staff per 100 units	Available tech.staff per 100 units	Sanctioned staff per 100 polluting units	Available staff per 100 polluting units	Available tech.staff per 100 polluting units
1	2	3	4	5	6	7
Correlation with pollution intensity *	0.15	0.09	0.02	-0.23	-0.28	-0.46

* Pollution intensity is measured as the ratio of the estimated number of red and orange category of polluting units to the total number of industrial units in the State.

3.3.9 It seems reasonable to hypothesise that as pollution intensity as defined above increases, the personnel available for pollution control per 100 industrial units goes up. This hypothesis is tested with the ratios presented in columns 2, 3 and 4 of Statement 3.1. The ratios suggest that there does not exist any significant positive relation between pollution intensity and staff per 100 polluting units. Having disproved the first hypothesis, it is further tested whether there is any direct relation between pollution intensity in manufacturing and the availability of staff per 100 polluting units. The ratios presented in columns 5, 6 and 7 suggest that there is, in fact, a negative relation between pollution intensity and staff per 100 polluting units. The last coefficient (column 7) is particularly important, in that it shows a fairly high negative relation between pollution intensity and the availability of scientific and engineering staff per 100 polluting units. **All this tends to suggest that the deployment of staff, particularly of technical staff, is not based on any scientific criterion.** It is appropriate that some rational criteria be developed for deployment of staff in SPCBs, keeping in view the functions of these institutions.

3.3.10 Engineering and scientific expertise of a State Board is a prime factor in monitoring and controlling pollution in a State. The Ses/S ratio, the ratio of the number of engineering and scientific staff to the total staff strength, averaged for all State Boards, works out to 45.6 percent (Table 3.3). This ratio stood at 25%, 26% and 31% in the SPCBs of Himachal Pradesh, Haryana and Goa respectively while it was as high as 81% in the SPCB of Punjab. Only 5 SPCBs – those of Gujarat, West Bengal, Punjab, Karnataka and Bihar – of the first category of 17 SPCBs had this ratio greater than 50 percent. **The high level of dispersion exhibited by individual State Boards around the average ratio speaks of the absence of any established norm in determining the staff composition of State Boards.** It may be seen (Table 3.2) that the distribution of whatever little staff available with the State Boards of J&K, Mizoram and Goa is highly skewed against engineering and scientific staff.

3.3.11 **All State Boards of the North East, probably with the single exception of the Assam Board, are crippled with gross inadequacies of manpower** (Table 3.2). The State Board of Arunachal Pradesh does not have separate staff of its own and is run by the personnel of the State Department of Environment & Forests. The Sikkim Board is managed by 4 employees with one senior scientist looking after the whole thing. Despite having own central laboratory, the Mizoram Board is unable to measure pollution because of the lack of scientific manpower. No inventorization has been carried out in Tripura too, owing to shortage of staff. With only 54 out of 467 sanctioned posts filled, the J&K Board is acutely understaffed.

Summing Up

3.4.1 SPCBs are required to be constituted with technically qualified people and to be represented adequately by trade, industry and local bodies. This is not the case with most of the SPCBs. The norms for determining the staffing pattern of the Boards have not been prescribed, leading to wide differences in the per polluting unit availability of staff for monitoring. The primary functional tool employed by SPCBs in controlling industrial pollution is inspection of polluting units. Scientific, engineering and laboratory staffs are all being employed in observing inspection norms. Problems like huge vacancy positions, influx of temporary staff, low pay scales of

some field posts and lack of powers with the SPCBs to create posts are discernible. Even in the limited context of controlling industrial pollution, some SPCBs do not seem to be appropriately staffed. Belliappa Committee also has expressed the same view. To conclude, lack of uniformity in the Constitution of the State Boards and differences in the per polluting unit availability of staff render the State Boards unequally positioned to discharge their duties of monitoring the inventorised polluting activities and furthering inventorisation.