

CHAPTER IX

DRAINAGE AND PREVENTION OF WATERLOGGING

From the point of view of agriculture, proper drainage of land is as important as irrigation. Rain water, if permitted to collect indefinitely in the fields, can harm the crops. If subsoil water level rises up to the root zone of the plants or above, it is injurious to plant growth and it causes waterlogging. Consequently, artificial irrigation can be of use if arrangements are made for drainage of the land to ensure that with the application of irrigation, subsoil water level does not rise up to the root zone of the plants. A natural consequence of waterlogging is salination which renders good agricultural land unfit for cultivation.

Therefore, it is imperative that management of irrigation practices must give due consideration for the drainage of land. Most of the irrigation Acts have provisions empowering state governments to prohibit the formation of obstructions to the free flow of water in any notified river, stream or any artificial drainage channel. For instance, the Northern India Canal and Drainage Act provides that whenever the state government apprehends injury to any land, or public health or public convenience due to obstruction of any river, stream or drainage channel, the state government may by notification published in the official gazette prohibit within limits stated in the notification the formation of any obstruction or may within such limits order the removal or other modification of such obstruction.¹ On publication of the notification the Divisional Canal Officer (D.C.O) or any other person authorised by the state government may order the person causing such obstruction to remove or modify the same within a prescribed time. If within the fixed time, such person does not comply with the order, the canal officer may himself remove or modify the obstruction and if the person who caused the obstruction fails to pay the expenses involved in such removal or modification, such expenses are to be recovered as an arrear of land revenue.² Similar provisions exist in the Bengal Irrigation Act,³ the Bombay Irrigation Act,⁴ the Madhya Pradesh Irrigation Act,⁵ the Orissa Irrigation Act⁶ the Mysore Irrigation Act,⁷ and the Jammu and

1. The Northern India Canal and Drainage Act 1873, s. 55.

2. s. 56.

3. The Bengal Irrigation Act 1876, ss. 40-45.

4. The Bombay Irrigation Act 1879, ss. 12-25.

5. The Madhya Pradesh Irrigation Act 1931, ss. 33-34.

6. The Orissa Irrigation Act 1959, ss. 7-8.

7. The Mysore Irrigation Act 1965, ss. 11-12.

Kashmir Canal and Drainage Act.⁸ Under the Orissa Irrigation Act, powers have been given to the collector or the authorised irrigation officer, in cases of emergency, to effect removal of the obstructions even before publication of notification.⁹ The expenses incurred are to be recovered as arrears of land revenue.¹⁰ It may be suggested that a similar provision should be made in the irrigation Acts of other states.

For the purpose of drainage of lands the power to prohibit formation of obstruction of the water flow of rivers alone is not enough. There must be power to construct field drains and drainage channels. Some of the irrigation Acts contain provisions to that effect also.

The provisions in the Bengal Irrigation Act,¹¹ the Bengal Development Act,¹² the Bombay Irrigation Act,¹³ the Mysore Irrigation Act,¹⁴ and the Bengal Drainage Act¹⁵, for construction of drainage works, are akin to each other. As an example, section 15 of the Bombay Irrigation Act may be given : Whenever it appears to the state government that any drainage work is necessary for the public health or for the improvement of the proper cultivation or irrigation of any land, or that protection from floods or other accumulations of water, or from erosion by a river is required for any land, the state government may cause a scheme for such drainage works to be drawn up and executed. The persons authorised by the state government to prepare such a scheme may exercise all or any of the powers such as (i) enter upon any land adjacent to the river to undertake surveys or levels ; (ii) dig and bore into the sub-soil, (iii) make and set up suitable land marks, level marks and water gauges, (iv) enter upon any land or building for inspecting or regulating the use of the water supplied.¹⁶ However, entry upon any building or enclosed court or garden attached to a dwelling house is to be effected by the officer only after giving reasonable notice to the occupier as the urgency of the case may allow.¹⁷ Any damage suffered by the occupier is to be compensated within one month¹⁸ and in case of dispute as to the adequacy of the compensation, the matter is to be referred to the collector whose decision is final.¹⁹

8. The Jammu and Kashmir Canal and Drainage Act 1963, ss. 52-59.

9. The Orissa Irrigation Act 1959, s. 8(2).

10. *Id.*

11. The Bengal Irrigation Act 1876, s. 43.

12. The Bengal Development Act 1935, s. 30.

13. The Bombay Irrigation Act 1879, s. 15.

14. The Mysore Irrigation Act 1965, s. 14.

15. The Bengal Drainage Act 1880, ss. 12-24.

16. The Bombay Irrigation Act 1879, ss. 7-9.

17. S. 10.

18. S. 34.

19. S. 36.

No provisions for the construction of drainage works exist in the Madhya Pradesh Irrigation Act, the Hyderabad Irrigation Act and the Orissa Irrigation Act.

Under the Northern India Canal and Drainage Act, the drainage scheme drawn up by the state government is published under section 57 together with an estimate of its cost and a statement of the proportion of such cost which the state government proposes to defray and a schedule of the lands which it is proposed to make chargeable in respect of the scheme. The Act was amended in its application to Punjab by which the procedure for construction of field drains has been expedited.²⁰ The amendment has added section 57-A by which the procedure for construction of field drains is the same as for the construction of field channels which has been outlined in detail in chapter IV relating to the construction of water courses and field channels.²¹ In short, the provision empowers the D.C.O. to prepare a scheme, publish it, and approve it after giving a fair hearing to the affected parties. The D.C.O.'s approval is subject to powers of revision to be exercised by the Superintending Canal Officer (S.C.O.) either *suo motu* or on the application of aggrieved parties. Further, the D.C.O. is empowered to acquire the necessary land for construction without following the long-drawn out procedure of the Land Acquisition Act 1894. The Act also bars the jurisdiction of civil courts in respect of matters relating to field drains. The cost of construction of drains is to be shared by the beneficiaries. Sections 59 and 60 lay down the procedure for fixing the share of beneficiaries. The share of the cost of the beneficiaries is to be fixed by rules made by the state government. An owner can contribute towards the charges payable by him either wholly or in part in terms of land, labour or cash. Such sums which remain unpaid can be collected as arrears of land revenue.

Thus it may be pointed out that Punjab has made some salutary provisions for the expeditious construction of field drains and sharing of the expenditure for such construction which may usefully be introduced in some other states. Punjab is an intensively irrigated state and hence it felt the need for field drains and drainage channels to prevent waterlogging and the consequent salinity of irrigated soil. With the introduction of increased irrigation in other states, they also will have to take some measures to counter waterlogging, taking into account local conditions of the country slopes, rainfall, crop pattern and subsoil water conditions. The practice, as adopted in Punjab, of making beneficiaries share a portion

20. Section 57-A was added to the Act of 1873 [in Punjab by Punjab Act 21 of 1958.

21. *Supra* at 22-44.

of expenditure for construction of field drains, may profitably be introduced in other states also in order to discourage, as far as possible, unnecessary demands for construction of small field drains in a drainage system.

Section 57 has given rise to some case law. In *Charan Singh v. State of Punjab*,²² where the alignment to chalk out the water drain to carryaway the "sem" water was varied at the instance of the Minister of Irrigation and Power without complying with the provisions of section 57, the order was held to be bad. Under sections 57 and 57-A, it was the D.C.O. who was empowered to frame and finalise drainage schemes after giving fair hearing to the affected parties. In the instant case the scheme was altered at the direction of the Minister who had no jurisdiction under the Act. When the Act had conferred powers on designated officials, it was they alone who were competent to exercise the powers and not anyone else.

The issue in *Harbans Singh v. State of Punjab*,²³ was whether it was incumbent on the state government to frame a scheme under section 57 and acquire land for purpose of training and canalising a group of *choes* (stream) or could the government proceed under the Land Acquisition Act 1894 and acquire land for the same purpose. The court stated that there was a basic distinction between acquisition of land for public purpose under the Land Acquisition Act and acquisition of land required for the execution of schemes under section 57. In the former case, land was to be acquired for a public purpose at public expense whereas in the latter case land was to be acquired for the benefit of the landholders at their cost. Therefore, the government in its discretion could exercise its powers under one statute or the other as it deemed fit. In the instant case it was held that the government could not be compelled to frame a scheme under section 57 and the acquisition of land under the Land Acquisition Act was upheld.

In *Ram Chander v. State of Haryana*,²⁴ a writ of mandamus was applied to compel the state government to frame a drainage scheme under section 57. The provision confers discretion on the government to frame such scheme. The question was whether the word "may" in the phrase "may cause a scheme for such drainage works to be drawn up" should be interpreted "shall" and the government should be held to be bound to frame such schemes. The court stated that once the government found that a case fell under the section, it was bound to frame a scheme and take all steps consequent upon it. To that extent "may" in section 57 must be read as "shall" and a duty must be imposed on the government. But the court added that the performance of that duty was conditional upon the subjective opinion of the government that drainage

22. (1963)65 Punj. L.R. 732.

23. A.I.R. 1965 Punj. 356.

24. I.L.R. (1968)1 Punj. 234.

works were necessary for any of the purposes mentioned in the section. The essence of court's decision was that it was within the discretion of the government to frame a scheme or not and mandamus would lie to compel the performance of that discretionary duty. It may be pointed out that the court's earlier observation that "may" was to be construed as "shall" in certain circumstances seems to be contradictory to its subsequent holding that the discretionary duty of the government could not be enforced through mandamus. Nevertheless, the court's decision is correct because what can be enforced through mandamus is a duty the performance of which is imperative and not discretionary with the authority concerned. In the context of section 57, the nature of government's duty is discretionary and not imperative.

TABLE

Provisions relating to Drainage

<i>S. No.</i>	<i>Statutes</i>	<i>Reference</i>	<i>Application</i>
1.	Bengal Development Act 1935	s. 30	State of West Bengal
2.	Bengal Drainage Act 1880	Whole Act	States of Bihar and West Bengal.
3.	The Bengal Embankment Act 1882	Part II, s. 7	State of West Bengal
4.	Bengal Irrigation Act 1876	Part IV, ss. 40-45	States of West Bengal and Bihar.
5.	Bombay Irrigation Act 1879	Part II, ss. 12-15	States of Gujarat and Maharashtra
6.	Jammu and Kashmir Canal and Drainage Act 1963	Part VII, ss. 52-59	State of Jammu and Kashmir.
7.	Madhya Pradesh Irrigation Act 1931	Chapter IV, ss. 33-34	State of Madhya Pradesh.
8.	Mysore Irrigation Act 1965	Chapter II, ss. 11-12 and 14	State of Mysore
9.	Northern India Canal and Drainage Act 1873	Part VII, ss. 55-62	States of Uttar Pradesh, Punjab and Haryana and Union Territory of Delhi.
10.	Orissa Irrigation Act 1959	Chapter II ss. 7-8	State of Orissa