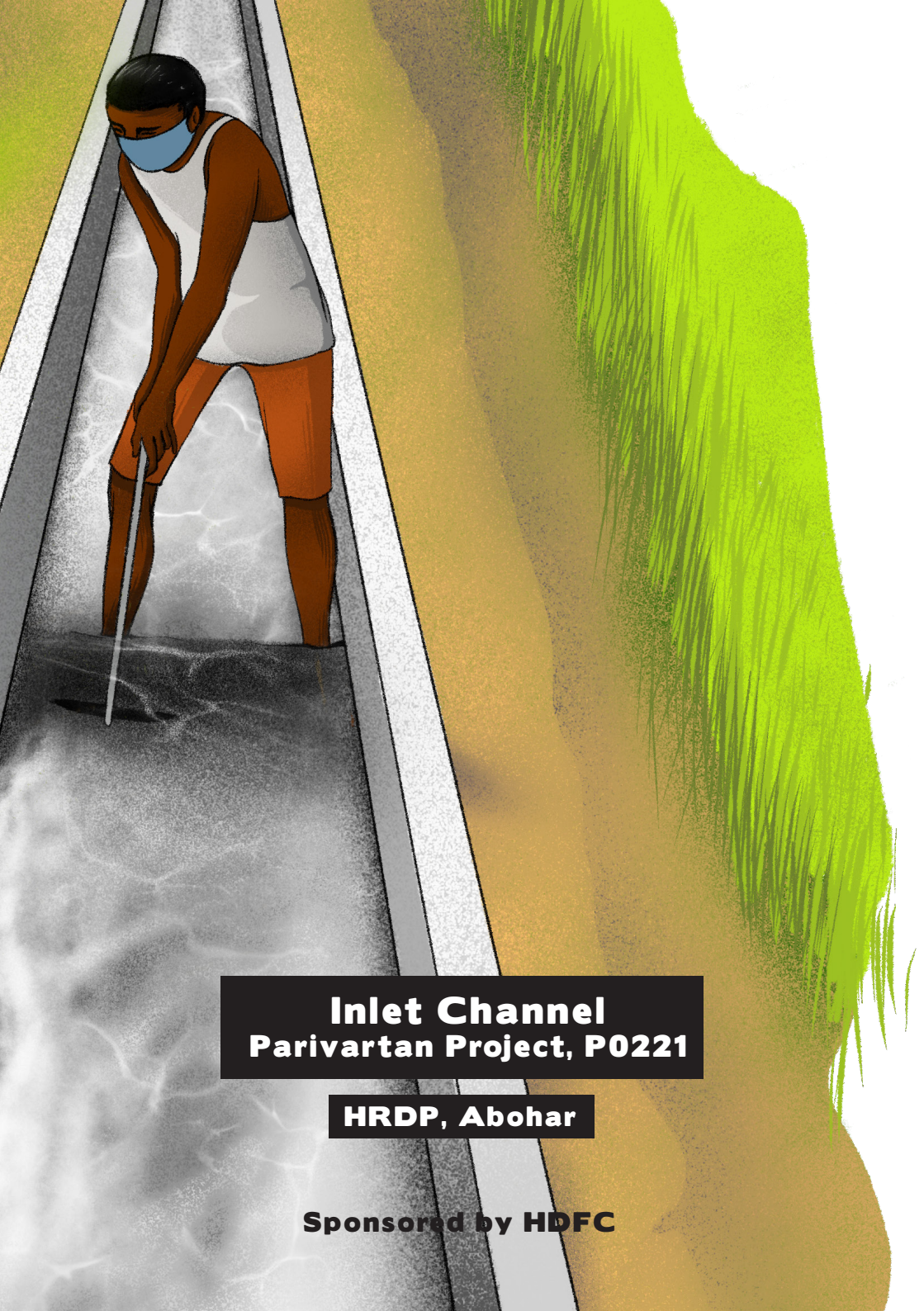




**Inlet Channel
Parivartan Project, P0221**

HRDP, Abohar

Sponsored by HDFC



Inlet Channel

Inlet channels are a type of minor distributary canals used for taking water directly from the prime canal or branch to the farmer's field. They are the main source of irrigation in Punjab and are popularly known as Khala. Field canals have smaller dimensions than the traditional channels. It is a narrow passage dug in between the fields to bring water to orchards and crop fields.

The dimension of such field canal built in the HRDP Parivartan project is 30 inches wide and 20 inches from the ground. However, in some of the areas, they are even 14 inches of height from the ground. The height variation is due to the low flow of water in those areas.

In HRDP Abohar, the canals have been built by using bricks and mortar and cemented to make them permanent in structure. The cemented channels save water losses. In this project, they have been constructed majorly on the kuchha canals. In mud canals/ kuchha canals, immense loss of irrigation water occurs. So a permanent structure over a mud structure is always desirable.

In the HRDP Abohar project, inlet channels of more than 6500 metres have been constructed in the project duration between October 2018 to September 2020. A 60-metre length of inlet channel can irrigate one acre of land.

The methodology of the selection of Beneficiaries and initiating construction work of Inlet Channels:

1. In every village, a Village Development Committee is formed which supports the development work carried by the Centre for Advanced Research and Development. Each VDC has 9 to 11 members. VDC plays a prime role in supporting the development work of CARD, identify the needy beneficiaries from the community and ensure using the benefits judiciously.

2. A system of community contribution is introduced where the beneficiaries are selected if they are ready to pay a significant amount for the construction of inlet channel in their field. The beneficiaries contribution ranges from 30 % to 35 % amongst the three project periods. The farmers who are willing to contribute are then selected.

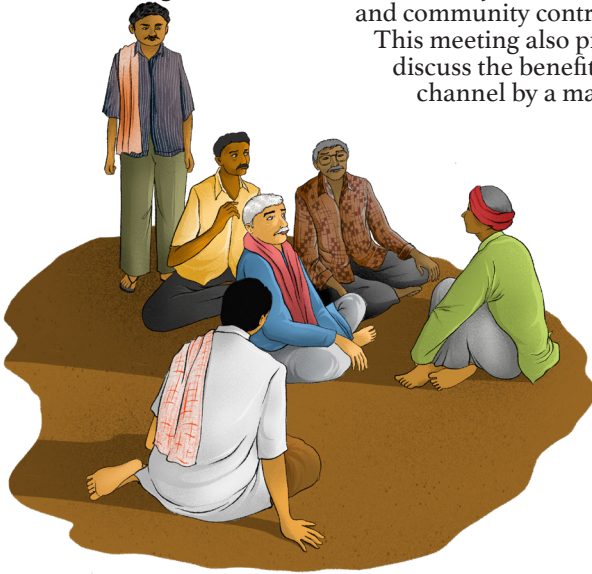
Levying the contribution amount from farmers ensure that they are watchful of the work carried out on their field and report to the committee of any discrepancies arising from work done by the contractor. Further, it ensures only the deprived person approach for the inlet channel.

3. After this, the vendors /contractors who have experience in inlet channel work and those who provide the lowest quote further ensuring the quality based on design and estimate are selected.

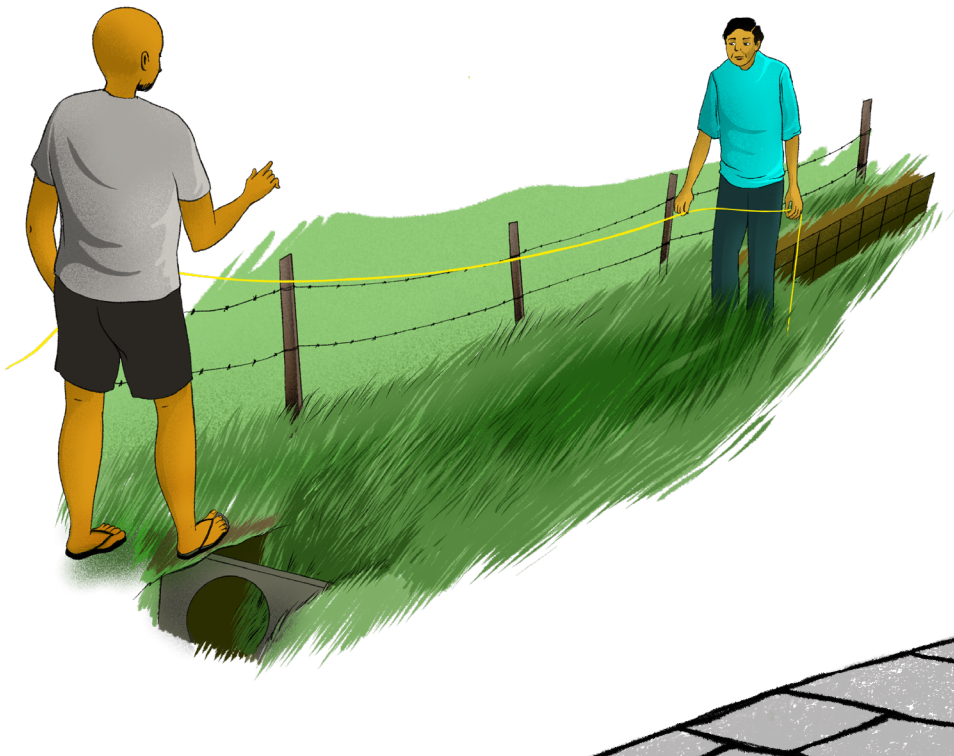
4. Farmers, then clear the track of bushes and grass before laying of a bed of the inlet channel.

Steps in inlet channel construction work:

- I. A meeting is held with the community members to discuss the beneficiaries and community contribution to finalise the spots. This meeting also provides an opportunity to discuss the benefits that arise while utilizing the channel by a maximum number of people.**

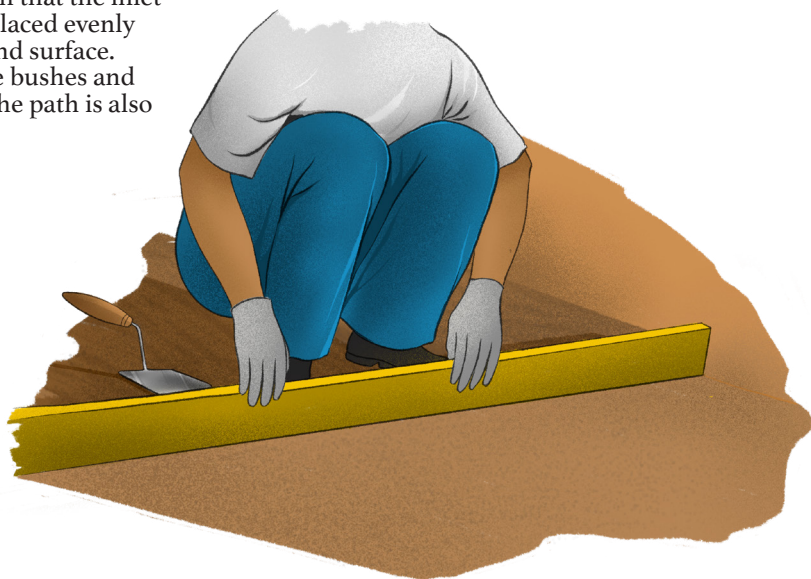


- 2. Selection of spots:**
Finalise the spot, where the construction work will take place. The length of the inlet channel is measured. Preferably those spots are selected from where the drainage or kuchcha khala passes.



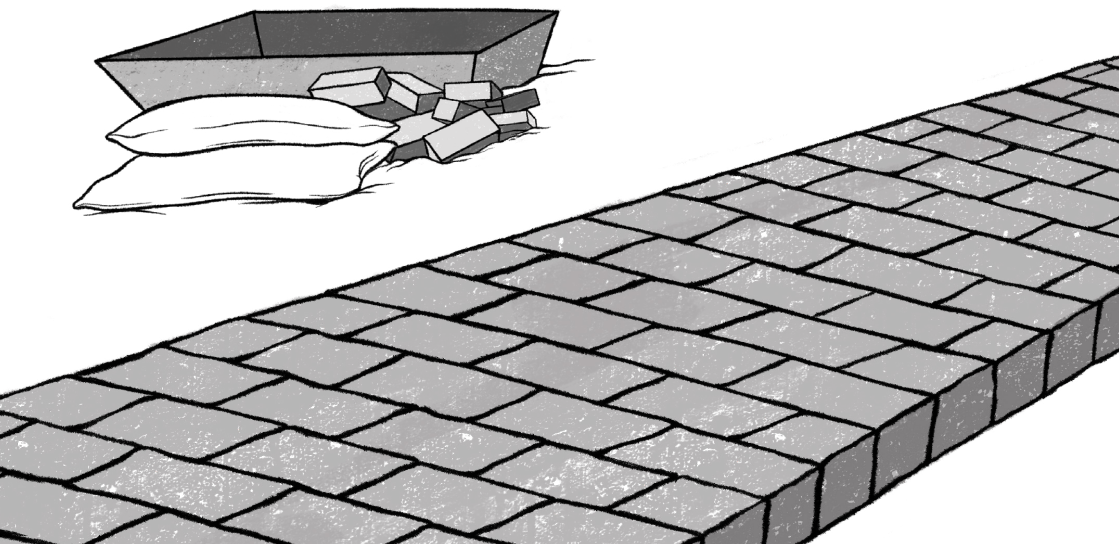
3. Levelling the path of the channel:

After spot selection, level of the base to lay the inlet channel such that the inlet channel is placed evenly on the ground surface. Clearing the bushes and grass from the path is also carried out.



4. Bed laying and construction work:

After the levelling of the ground surface bricks are laid to give a foundation to the inlet channel. On this foundation, the next level of work progresses. The site is often checked by field staff for quality issues, and ensure that parameters of construction are up to mark.



5. Work In Progress: Monitor on-going work by Project Engineer / Expert.

It is necessary to check for the faults, materials, fissures, strength and alignment of the channel during construction. So our expert/project engineer often visit the site to check if the inlet channel while being constructed, complies the design and estimate.



6. Nakka (water outlet for field) in a Channel:

Provide Nakka or outlets in an inlet channel at a regular interval that helps for the outflow of water from the inlet channel to the irrigation fields. In general, the outlets are placed at a distance of 60 metres. The Nakkas use Reinforced Concrete Cement frame and cover lid to open and close the water flow into the farm fields.

7. A functional inlet Channel:

A functional inlet channel thus built will plaster structure over brick masonry work. It will have a water outlet at around 60 metres on both sides. It will also have a Burj (outstretching brick structure) on every 20 metres to provide strength to the channel to withstand water pressure. The farmers must remove mud from the inlet channel which gets deposited over time, to protect the inlet channel from damage.



About the Organisation

Centre for Advanced Research & Development (CARD) has been established to promote action research and to apply its findings for the protection and development of society and its environment. We primarily promote Rural Livelihoods through sustainable human and natural resource management. CARD believes in Mainstream Development and Community-based Natural Resource Management approach to reduce rural poverty. The sustainability of this approach depends upon the extent of empowering the communities at all levels by educating them on cost and benefits sharing, and judicious use of their entitlements available to them through various means.

