# Satyamev Jayate Water Cup 2019 | Marking System

The participating villages will be judged for a total of 100 marks under the following broad heads:

Sr. No.	Component	Maximum Marks
1.	Wastewater Management	5
2.	Conservation of Trees	5
3.	Soil and Water Conservation 25 Structures Built Through Shramdaan	
4.	Soil and Water Conservation 15 Structures Built Using Machines	
5.	Adequate Weightage to Area 10 Treatment and Ridge Line Work	
6.	Quality of Structures 10	
7.	Soil Testing 5	
8.	Farms Free of Crop Burning 5	
9.	Water Saving Techniques 5	
10.	Water Budgeting 10	
11.	Repair of Existing Structures/ 5 Innovative Initiatives	
	Total	100

Each of these is explained in detail below.

# 1. Wastewater Management (5 Marks)

Under this section, a total of 5 marks shall be awarded for management of wastewater.

Following options shall be considered for the competition:

# Option 1: Soak pit

Under this section, marks are awarded on the basis of the ratio of the soak pits to the total population of the village/Gram Panchayat.

However, two difficulties might arise regarding the soak pits:

- 1. If the type of soil is fine and black, water does not percolate.
- 2. In case basalt is found just 4-5 feet below the surface, water does not percolate.

In these instances, instead of percolating underground, the water rises up to the surface and the soak pits do not contribute to cleanliness in the village. In such instances, it is technically incorrect to dig a soak pit. Where faced with these difficulties, one can pick from the following options:

#### Option 2: Kitchen Garden

Domestic wastewater can be recycled and used to grow vegetables and fruit trees in the kitchen garden.

Or

## Option 3: Public Garden

When there is not enough place for a kitchen garden or if there is a lack of willingness to develop one, one can look at the option of developing a public garden on the place where all the domestic wastewater from the locality is collected.

In such gardens, one may plant species such as *Alu*, a type of Arum and *Kardal* (Canna Indica). These plants purify water by absorbing pollutants in it. This wastewater may entirely be used for such a garden. If there is excess water which is purified in this process, it can be directed to an existing nala or a stream.

The method of awarding marks is mentioned below. If more than 80% of houses in the village have carried out wastewater management as per these guidelines, the village shall be awarded 5 marks under this section.

Percentage of Families Managing Wastewater		
More than 80%	5	
More than 70% to 80%	4	
More than 50% to 70%	3	
More than 30% to 50%	2	
10% or more to 30%	1	
Less than 10%	0	

- 1. Only those soak pits, which have already been in use and kitchen gardens or public gardens that have been developed <u>before</u> the competition begins shall be considered for the competition.
- 2. Pits that are dug for toilets are not the same as soak pits. They shall not be considered.
- 3. Community soak pits shall not be considered.
- 4. The size of the kitchen garden or public garden should be such that the wastewater does not get stagnated in nalas or in the gardens. Slope shall be given to nalas in order to allow the water to flow freely and not accumulate.
- 5. Wastewater management of one family shall be considered for any one of the following: soak pit, kitchen garden, public garden. Not more than one instance shall be considered.

#### 2. Conservation of Trees (5 Marks)

Trees help prevent soil erosion to a great extent, aid the percolation of water and also increase the probability of rainfall in a region. Plantation in the watershed is a vital and sustainable treatment. In this context, it is important to plant and conserve trees in the village.

Every family is expected to plant 2 trees. Marks shall be awarded on the basis of the ratio of families that have planted and protected the saplings, to the population of the village. Marks shall be awarded as per the following table:

Percentage of Ratio of Plants to Families in the Village		
200%	5	
More than 160% and less than 200%	4	
More than 140% and less than 160%	3	
More than 100% and less than 140%		
60% or more up to 100%	1	
Less than 60%	0	

#### Please note:

- 1. Saplings to be planted shall be at least 1 foot tall and belong to species that grow tall.
- 2. The local species of trees tend to survive longer since they are already acclimatised to the local ecology. Hence, saplings to be planted shall only be of local species.
- 3. Contiguous cultivation of horticultural plants shall not be considered valid for the competition.
- 4. Saplings planted from November 2018 onwards shall be considered valid.

- 5. Saplings shall be planted either in winter before the competition begins or after the arrival of the rains. If the verification team visits a village in which it has not rained at all but finds that the village has collected saplings; in such a case, 1-foot tall saplings in plastic bags shall be considered valid. However, the pits for the saplings require to have already been dug before the team's visit. Nevertheless, when the judges at the taluka and state level visit the village, the saplings need to have been planted and they must be alive.
- 6. Saplings planted in the kitchen gardens or public gardens shall not be taken into consideration under this section.
- 7. Saplings may be planted anywhere in the village. However, if planted in front of a school or home, tending to them becomes easier. They shall also be considered valid, nonetheless, even if they are planted in the farms.

# 3. Soil and Water Conservation Structures Built Through Shramdaan (25 Marks)

25 marks are allotted for treatments or structures created by Shramdaan that have water storage or silt trapping potential.

Please note the following in this regard:

- 1. Only the structures/treatments created through community Shramdaan from the competing Gram Panchayat shall be considered in this section. Please remember for the purposes of this competition, Shramdaan does not allow the use of labour from outside the competing Gram Panchayat.
- 2. There is an exception to the above rule. Certain structures require skilled labour for their construction. For e.g., skilled masons for cement nala bunds or those who make the mesh/net for gabions. Some villages may not have such skilled labourers. In such cases, in order to ensure that the quality of the structures is sound, you may get skilled workers from outside the village. Please note that unskilled labourers have to be from within the village.
- 3. Only the structures/treatments created in the period of the competition, i.e. from 8<sup>th</sup> April 2019 to 22<sup>nd</sup> May 2019 shall be counted for this purpose. Any work done before 8<sup>th</sup> April 2019 and after 22<sup>nd</sup> May 2019 shall not be counted. Any work that is half complete (for e,g., a half-completed earthen dam) before 8<sup>th</sup> April 2019 and after 22<sup>nd</sup> May 2019 shall be excluded for the purposes of the competition.
- 4. Marks shall be granted on the basis of the volume of combined water storage and silt trapping potential created. Total potential of water storage and silt trapping created by the Gram Panchayat would be divided by the total population of the Gram Panchayat to calculate per capita storage potential.

- 5. For a village creating less than 10,000 cubic metres total capacity through Shramdaan, full marks, i.e. 25 marks would be given for achieving 6 cubic metres or more water storage per capita. Gram Panchayats/villages creating lesser water storage capacity than this would be granted proportionately lesser marks. For e.g., 3 cubic metres storage per capita will get 12.5 marks.
- 6. If a village reaches the 10,000 cubic metres level, it shall be awarded 1 bonus mark. Thereafter, for every further 2,500 cubic metres, it shall be awarded 1 bonus mark. The following table explains the same:

Total Capacity Created by the Village Through Shramdaan	Bonus Marks
10,000 cubic metres capacity	1 bonus mark
12,500 cubic metres capacity	2 bonus marks
15,000 cubic metres capacity	3 bonus marks
17,500 cubic metres capacity	4 bonus marks
20,000 cubic metres capacity	5 bonus marks and further in this manner

For e.g., if a village reaches the 11,000 cubic metres level, it shall be awarded 1 bonus mark. For 17,000 cubic metres work, it shall receive 3 bonus marks, for 18,000 cubic metres work, 4 bonus marks. 25 will be the maximum marks under this section. The village will be able to see its target on the App.

- 7. After securing full 25 marks in this section, the additional Shramdaan shall be counted under the machine work in section 4. Such additional work shall be awarded 3 marks. For e.g., to obtain full marks in this section, the target is 2,500 cubic metres. If the village has done 3,500 cubic metres work, then the additional 1,000 cubic metres shall be given 3 marks and 3,500 cubic metres shall be added in the machine work. This will be calculated automatically by the Paani Foundation app.
- 8. The above rules attempt to bring large and small villages on an equal level.
- 9. Structures like small earthen dams and loose boulder structures reduce the speed of flowing water and trap silt. As with the volume of water storage capacity at the upper level of the structure, its capacity to trap silt can also be taken into consideration. During the period of the competition, the total storage capacity created by the revenue villages/Gram Panchayats will be a sum of the capacity of all these structures to trap silt and their water storage capacity.

# Method to Calculate the Silt Trapping Capacity and Water Storage Capacity of Structures/Treatments that are a Part of the Water Cup

# 1. Continuous Contour Trench (CCT) or Staggered Contour Trench (SCT)

Storage potential (cubic metres) = Dimensions of the dug pit x 2

= Total length (m) x Average width (m) x Average depth (m) of the pit

# 2. Deep CCT/Water Absorption Trench (WAT)/Water Absorption Deep Trench (WADT)

Storage potential (cubic metres) = Dimensions of the dug pit

= Total length (m) x Average width (m) x Average depth (m) of the pit

### 3. Compartment Bund, Farm Bund

Storage potential (cubic metres) = Total length (m) x Average height of the bund (m)

The bund should be perpendicular to the slope as shown in the video made by Paani Foundation and must have a hook on both ends. Bunds parallel to the slope shall not be considered valid.

#### 4. Contour Bund, Graded Contour Bund

Storage potential (cubic metres) = Total length (m) x Average height of bund (m) x 2

## 5. Inlet-Outlet Farm Pond

Storage potential (cubic metres) = Volume of farm pond x 2

= Average length (m) x Average width (m) x Average depth (m) x 2

While measuring, only the dug portions shall be considered. The excavated heap of soil around the pit shall not be included.

# 6. Small Earthen Structures or Earthen Gully Plugs (EGP)

Storage potential (cubic metres) = Volume of the structure

= Total length of EGP (m) x Height of EGP (m) x Length of backwater (m) x 0.25

Where, length of backwater = Average height of EGP (m) x 15

Assuming that the EGP is constructed on a stream of 6.5% bed slope, the constant multiple will be 15.

# 7. Loose Boulder Structures (LBS)/Stone Gully Plugs

Storage potential (cubic metres) = Volume of the structure

= Total length of LBS (m) x Height of LBS (m) x Length of backwater (m) x 0.25

Where, length of backwater = Average height of LBS (m) x 10

Assuming that the LBS is constructed on a stream of 10% bed slope, the constant multiple will be 10.

#### 8. Gabion Structure

Storage potential (cubic metres) = Volume of the structure

= Total length of gabion (m) x Height of gabion (m) x Length of backwater (m) x 0.25

Where, length of backwater = Average height of gabion (m) x 15

Assuming that the gabion is constructed on a stream of 6.5% bed slope, the constant multiple will be 15.

#### 9. Earthen Nala Bund (ENB)

Storage potential (cubic metres) = Volume of the structure

= Total length of ENB (m) x Height of ENB (m) x Length of backwater (m) x 0.25

Where, length of backwater = Average height of ENB (m) x 30

Assuming that the ENB is constructed on a stream of 3% bed slope, the constant multiple will be 30.

#### 10. Cement Nala Bund (CNB)

Storage potential (cubic metres) = Volume of the structure

= Total length of CNB (m) x Height of CNB (m) x Length of backwater (m) x 0.25

Where, length of backwater = Average height of CNB (m) x 70

Assuming that the CNB is constructed on a stream of 1.5% bed slope, the constant multiple will be 70.

#### 11. Nala Widening and Deepening and Desilting of Old Structures

Storage potential (cubic metres) = Volume of excavated soil

= Average length (m) x Average width (m) x Average depth of the pit (m)

The storage potential of the nala/structure will be calculated only by the increment in the nala/structure due to the widening and deepening or desilting, and not by the total capacity of the nala/structure.

Nala widening and deepening shall be considered valid only in places where either CNB/ENB exist, or where the widening and deepening are carried out by box system and the distance between two boxes is pitched properly.

The widening and deepening of nala/structure will be counted only till the zero level of water, not beyond that. Zero level is the point where the head of the pitched CNB and ENB structures meet the bed of the nala.

#### 12. Pitching of the Space Left Between Two Boxes

It is necessary to properly pitch the space between two boxes in the process of deepening of the nala. If pitching is not done, the space will break and flow away in floods. Such pitching shall be marked only under Shramdaan.

Storage potential (cubic metres) = Surface area (metres) x Thickness of the pitching (0.25 metres)

## 13. Well Recharge

Recharge of one well = 800 cubic metres

#### Please note:

1. An upper limit of 25% has been set for the measurement of well recharge through Shramdaan. Cubic metres only upto 25% of the target will be counted in Shramdaan. Extra cubic metres, if any, will be counted in machine work. However, there will be no marks for such additional work.

For e.g., let's say the target for Shramdaan is 2,000 cubic metres. If 5 wells have been recharged, then as per 800 cubic metres per well, 800 x 5 = 4,000 cubic metres will be created. According to the marking system, only 25% of the target, i.e. only 500 cubic metres, will be counted. Additional 3,500 cubic metres will be included under machine work and no marks will be given to it.

- 2. The recharge of drinking water and community wells shall not be considered.
- 3. All technical guidelines regarding well recharge should be followed meticulously, especially those pertaining to site selection. Please watch the film regarding the same on Paani Foundation's app.

# **Summary of the System of Measuring the Water/Silt Trapping Potential of Structures**

Sr. No.	Type of Treatment	Length of Structure (Metres)	Average Width of Structure (Metres)	Average Height/ Depth of Structure (Metres)	Constant Multiplier	Backwater Length (Metres)	Formula to Calculate Water/Silt Storage Capacity
1	2	3	4	5	6	7 = 6 x 5	8
1	CCT/SCT				2		3 x 4 x 5 x 6
2	Deep CCT/WAT/ WADT						3 x 4 x 5
3	Farm Bund/Compartment Bund				1		3 x 5 x 6
4	Contour Bund/Graded Contour Bund				2		3 x 5 x 6
5	Inlet-Outlet Farm Pond				3		3 x 4 x 5 x 6
6	Earthen Gully Plugs				15		3 x 5 x 7 x 0.25
7	Loose Boulder Structures/Stone Gully Plugs				10		3 x 5 x 7 x 0.25
8	Gabion Structure				15		3 x 5 x 7 x 0.25
9	Earthen Nala Bund				30		3 x 5 x 7 x 0.25
10	Cement Nala Bund				70		3 x 5 x 7 x 0.25
11	Nala Widening and Deepening/Desilting of Storage Areas						3 x 4 x 5
12	Pitching of the Space Left Between Two Boxes				0.25		3 x 4 x 6
13	Well Recharge						800

# 4. Structures/Treatments for Water Storage or Silt Trapping Built Using Machines (15 Marks)

15 marks are allotted for treatments or structures created by using machines that have water storage or silt trapping potential.

#### Please note:

- 1. Any work that has a combination of machine and labour will be counted as machine work.
- 2. Total potential of water storage and silt trapping created by the Gram Panchayat would be divided by total geographical area (TGA) of the Gram Panchayat to calculate per hectare storage potential. The performance of the Gram Panchayats would be marked based on per hectare storage potential created.
- 3. Gram Panchayats achieving 100 cubic metres or more storage per hectare of TGA would secure full marks that are 15. Gram Panchayats creating lesser potential than this would be granted proportionately lesser marks. For e.g., a Gram Panchayat achieving 50 cubic metres of storage per hectare would secure 7.5 marks.
- 4. The method of calculating the storage potential for different types of structures will be the same as given in section 3 above.

# 5. Adequate Weightage to Area Treatment and Ridge Line Work (10 Marks)

The main aim of the Satyamev Jayate Water Cup is soil and water conservation. This work is, however, effective only when done scientifically. This requires treatments from ridge to valley. Each farmer's field also needs to be treated as a micro-watershed where soil erosion must be minimised and water conserved.

In sections 3 and 4, treatments 1 to 8 and 13 respectively address precisely these issues. To encourage these treatments, they have been allotted 10 marks. These marks will be calculated automatically by the Paani Foundation app. These marks will be calculated in the following manner:

- a. The total amount of work (T) in cubic metres a Gram Panchayat must do under sections 3 and 4 in order to get full marks must be arrived at. T is thus the sum of the work that must be done by Shramdaan (S) and by machines (M).
- b. S (Shramdaan) = The work in cubic metres a Gram Panchayat must do to get full marks of 25 under Section 3
- M (Machine work) = The work in cubic metres a Gram Panchayat must do to get full marks of 15 under Section 4

$$c. T = S + M$$

d. The total amount of work in cubic metres a Gram Panchayat did in the competition period for the treatments listed under numbers 1 to 8 and 13 in sections 3 and 4 above is

added. Let us call this 'A' (Area Treatment). This work is a part of soil and water conservation work. We hope that maximum structures of this nature are created.

- e. If A is 50% or more of T, then the Gram Panchayat will get full 10 marks.
- f. If A is less than 50% of T, then the Gram Panchayat will get proportionately less marks as per the table below.

Percentage of Storage Created by Area and Ridge Treatments = $\frac{A}{T}x$ 100		
50% and above	10	
45% and above but less than 50%	9	
40% and above but less than 45%		
30% and above but less than 40%	5	
20% and above but less than 30%	3	
Less than 20%	0	

For e.g., if the population of Dongarwadi Gram Panchayat is 100 and their area is 100 hectares:

- S = Shramdaan to be done to score full marks under Section 3
  - = Population of the Gram Panchayat x 6
  - $= 100 \times 6$
  - = 600 cubic metres

M = Work using machines to be done by the Gram Panchayat to score full marks under Section 4

- = Geographical area of the Gram Panchayat (hectare) x 100
- = 100 x 100
- = 10,000 cubic metres

T = Total work to be done by Dongarwadi Gram Panchayat to score full marks under Section 3 and 4

- = S + M
- = 600 + 10,000 cubic metres
- = 10,600 cubic metres

Suppose the total amount of work (A) that Dongarwadi did for the treatments listed under numbers 1 to 8 and 13 in sections 3 and 4 is 4,000 cubic metres. Under section 5, the calculation shall be as follows:

Based on the above, 5 marks shall be awarded to Dongarwadi.

Suppose the total amount of work (A) that Dongarwadi did for the treatments listed under numbers 1 to 8 and 13 in sections 3 and 4 is 8,000 cubic metres.

Based on the above, full 10 marks shall be awarded to Dongarwadi.

#### 6. Quality of Work Done (10 Marks)

All soil and water conservation structures and treatments, soak pits, nurseries, farms free of crop burning, repairing of old dams and well recharge will be quality-tested and marks allotted for the same is 10.

These marks will be given in the following manner:

- a. All over Maharashtra, villages in the lead during the Water Cup and villages in the running for the taluka level prizes will be allotted these marks by judges appointed by Paani Foundation.
- b. The conditions for marking are as follows:
- 1. Site-selection of the various treatments that are executed
- 2. Alignment and marking of the structures (Is a hydromarker used where required? Are structures that should be on the contour built correctly? Is the farm bund perpendicular to the slope?)
- 3. Have the structures been built as per technical parameters?
- 4. Use of the required tools, quality of the structure, curing, finishing, etc.
- 5. Plans for the maintenance and repair of the structures

# 7. Soil Testing (5 Marks)

In this section, 5 marks will be given for soil testing. Increasing the organic carbon of the soil greatly increases its water conservation capacity. Hence, every farmer should know the level of organic carbon of his soil and must increase it. Marks are given in accordance with the number of farmers who do soil testing in the competition period.

The marks will be based on the percentage of the total landowners in the competition village that has done soil testing. The details are as follows:

Percentage of Total Landowners Who Have Done Soil Testing		
50% or more	5	
40% or more but less than 50%	4	
30% or more but less than 40%		
15% or more but less than 30%	2	
Less than 15%	0	

Soil testing done between 1st January 2018 to 22nd May 2019 will be considered for the competition.

#### 8. Farms Free of Crop Burning (5 Marks)

Biomass is constantly being created by the remains of the crops and trees (leaves, flowers, branches, stems, etc.). If such biomass is consistently composted and added to, the organic carbon of the soil increases. However, in our villages this biomass is regularly burnt on a large scale. This results in the reduction of organic carbon level and the fertility of the soil. Moreover, it also reduces the water-holding capacity of the soil.

The organic carbon level of soil can be increased by composting biomass in various ways. Hence, marks have been allocated to putting an end to burning of biomass and using it instead for creating manure. All of the following composting methods shall be considered valid:

- 1) Composting pits/heaps in/around the farm
- 2) Bio-dynamic compost heaps
- 3) Nadep
- 4) Mixing crop residue via rotavator/mulcher/slasher, etc.

Marks will depend upon the number of landowners who have adopted one of the above methods. Details are as below:

Percentage of Landowners Who Have Built Compost Pits or Heaps, Bio-Dynamic Compost Heaps, Nadep or Mixed Crop Residue		
50% or more	5	
40% or more but less than 50%	4	
30% or more but less than 40%	3	
20% or more but less than 30%	2	
10% or more but less than 20%		
Less than 10%	0	

- 1) The open dumps/pits (ukirde) of household waste will not be considered.
- 2) Compost pits, bio-dynamic compost heaps, or Nadep constructed before the commencement of the competition will also be considered.
- 3) Construction of one Nadep or bio-dynamic compost heap will be considered as the target of 10 landowners, provided the composting of dry leaves and twigs is visible. Mere construction will not be considered valid. Care should be taken that there is no plastic waste in it, and that the structure is built according to the government guidelines.
- 4) The government guidelines for building a Nadep are as follows: length 3.60 metres, width 1.50 metres, and height 0.50 metres.
- 5) To build a bio-dynamic compost heap, mark out a rectangle of length 5 metres and width 2 metres. Heap wet and dry waste one above the other in this rectangle, until the height is 1-1.5 metres.

# 9. Water Saving Techniques (5 Marks)

Huge amounts of water can be saved by using water saving techniques. Following techniques shall be considered valid:

- a. Drip irrigation
- b. Sprinkler irrigation
- c. Broad bed furrows (B.B.F.)
- d. Mulching paper
- e. Organic mulching

In this section, competing villages shall secure marks based on the comparison between the area of land on which water saving techniques have been employed and the total area of land under cultivation in the rabi season of the year 2018. The detailed marking system is explained below.

Ratio of Land Under Cultivation in Rabi Season of 2018-2019 to Land on Which Water Saving Techniques Have Been Employed		
Equal to or more than 50%	5	
Equal to or more than 30% and less than 50%		
Equal to or more than 15% and less than 30%		
Equal to or more than 5% and less than 15%		
Less than 5%	О	

- 1. The land on which water saving techniques have been employed before the commencement of the competition shall also be considered in the competition.
- 2. If more than one water saving techniques are being employed on a piece of land, each structure shall be considered independently. For e.g., if drip irrigation and mulching, both, are being used on 10 hectares of land, then the area on which water saving techniques have been employed shall be counted as 20 hectares.
- 3. Mere contracts, agreements or booking of drip or sprinkler irrigation shall not be considered valid.
- 4. In this section, to secure full marks, competing villages are required to bring at least 10 hectares of land under water saving techniques. Even if in a competing village, there is no rabi area or if it is less than 10 hectares, to secure full marks, the village must engage 10 hectares of land, and to secure 3 marks, 5 hectares of land under water saving techniques.

Villages that bring less than 5 hectares of land under water saving techniques shall not be given any marks. For e.g., if a competing village's rabi area in 2018-19 is 2 hectares, and if it works on 4 hectares of land to save water, the village shall not be given any marks. If the same village works on 9 hectares of land, then 3 marks, and if it works on 10 hectares, then full 5 marks shall be awarded.

#### 10. Water Budgeting (5 Marks)

This section is about the judicious use of available water and the ways in which water usage can be reduced. This section will evaluate and mark the measures taken by the villagers, especially farmers, to strike a balance between the available water and the water used for drinking, household, agriculture and other purposes.

Villagers need to undertake the water budgeting exercise themselves to get a deeper understanding of its demand and supply. Water budgeting allows a village to know whether it is water-surplus or water-deficit. 5 marks are allocated for preparing a water budget, as explained below.

Water Budget-Related Activities	Marks
Setting up Rain Gauge in Village	1
Rain Register	
Current Water Budget	2
Proposed Water Budget	2
Measuring Water Level of Wells	2
Efforts Towards the Execution of the Proposed Water Budget	2

**Rain Gauge:** There should be at least one rain gauge in a village. However, depending on the geography of the village, more than one rain gauge might be required for better data. Rain gauge should be installed in a technically sound spot. One or more persons should be appointed and trained to manage the rain gauge and to measure daily rainfall.

**Rain Register:** Every village must maintain a register in which daily rainfall is recorded. Unexpected showers and the rainfall in June should also be noted in the register. The summary of this record should be kept in a community space, where the villagers can access it.

**Current Water Budget:** 2 marks will be given for presenting a technically sound water budget with the details of the year 2018-19.

**Proposed Water Budget:** The proposed budget for 2019-20 must include the measures envisioned to reduce water shortage, increase water storage and control/reduce water usage/expenditure. Changes suggested in cropping pattern by the revenue village/Gram Panchayat to move towards a neutral or positive budget should also be included. Based on the water budget of the village, more efficient water management techniques should also be listed in this budget. It is expected that the village collectively decides upon the changes in cropping pattern and other measures to reduce water expenditure in Gram Sabha meetings. This will reduce the extraction of groundwater.

Both the water budgets should be placed in a community space where everyone can see them. It is necessary to make arrangements for recording the seasonal changes in the budget.

**Measuring Water Level of the Wells:** To secure full marks, a village must identity at least 10 wells in different areas, technically measure their water levels in the month of May before monsoon, and record them in a register. The same information should also be filled in Paani Foundation app. If there are less than 10 wells in a village, the water levels of all the wells should be measured for full 2 marks.

**Efforts Towards the Execution of the Proposed Water Budget:** Taluka and state level judges will evaluate the overall awareness about water budget amongst the village community, and their commitment to execute the proposed budget.

# 11. Repair of Existing Structures/Innovative Initiatives (5 Marks)

Most villages have existing watershed treatment structures like CNB, MNB, KT Weir and minor irrigation tanks. However, they are often leaking or broken down. It is much cheaper to repair these old structures than to build new ones. Also, these existing treatments are often located on the most appropriate sites. Hence, repairing the existing treatment structures is essential as well as beneficial. The 5 marks for this section have been divided into three sub-sections as follows:

# a) Surveying the Existing Structures and Making a Report About the Following:

- a. Total number of all existing structures
- b. Measurement of each existing structure, volume of water storage, irrigated area capacity and number of farmers benefitted
- c. Current condition of each existing structure- does it leak or have any other defects? If so, what is the defect and what is the plan to repair them?
- d. A village map plotting the existing structures
- e. A photo with GPS of each existing structure

1 mark will be given if this report is duly filled. This work can be done even before the commencement of the competition. If a competing village or Gram Panchayat doesn't have a single structure as above, then instead of the report, for 1 mark they can recharge wells or undertake innovative initiatives. Every recharged well will be awarded 1 mark each.

#### b) Repairing Existing Structures

Marks shall be awarded based on the number of structures repaired. Cleaning of the storage bodies shall not be counted under repairs. Errors in construction, completion of incomplete work, and repairing leakage shall be counted as repairs.

If 2 or more structures are repaired, then 4 marks will be awarded. If 1 structure is repaired, 2 marks shall be awarded.

If a revenue village/Gram Panchayat has only 1 structure that can be repaired, then the revenue village Gram Panchayat should first repair that one structure and for the remaining 2 marks, the village should recharge wells.

If a revenue village/Gram Panchayat has no structure that can be repaired, then the revenue village Gram Panchayat should recharge wells for 4 marks.

Repairing of Existing Structures	Marks	<b>Marks for Innovative Initiatives</b>
2	4	О
1	2	2
0	0	4

# c) Innovative Initiatives:

It is important that the village repair existing structures. If, however, this option is unavailable, the village can work for marks under this section.

For the marks that will be awarded for innovative initiatives, the judging committee will consider the need for the work, its quality, specific characteristics of the village, and the challenges faced while doing the work.