

# **Certificate Course on Participatory Irrigation Management (PIM)**

## **Module 14- Use of Information Technology by Water User Associations (WUAs)**

### **Topic 14.1 – Use of information technology in daily uses for WUAs.**

#### **Topic 14.1**

Use of information technology in daily uses for WUAs

#### **Topics of Module 14:**

- 14.1 Use of information technology in daily uses for WUAs
- 14.2 Use of information technology in Irrigation Management
- 14.3 Use of remote sensing in Agriculture
- 14.4 Importance of weather forecasting for WUA members

#### **1. Introduction:**

Use of information technology is very helpful for daily working of Water Users Association. Information Technology (IT) mainly includes use of Computers, Mobiles, Drone, Satellite & Remote Sensing, Geographical Information System (GIS) including internet. These techniques can be used extensively but only

simple uses of IT will be discussed in this chapter which can be adopted by a Water Users Association (WUA) or an individual with basic knowledge or education. Social media applications like WhatsApp, Facebook, Twitter, SMS etc. can be used for circulating/transmitting the information to large number of people. Use of IT facilities not only reduces the expenditure as well as it reduces the time spent by any individual on any issue. There is no need to go anywhere for any issue whereas it can be resolved from his house on mobile.

## **2. Solving of issues with mutual discussions:**

At present most of the persons are using mobiles which are very helpful in our daily uses. Members of WUA can be aware of the on going works, future planning, present condition of irrigation system through mobile by discussion with each other.

At the same time any farmer or member of the WUA can discuss or inform WUA President or member of the Managing Committee about his any problem/issue as well as can get any information like water availability, canal scheduling, irrigation charges etc. on mobile phone.

## **3. Information sharing:**

Previously, all communication/information sharing was generally done through letters, posts etc. With the availability of mobiles, now a days information sharing like information for General Body Meeting, Agenda for the meeting, Irrigation Programme, Demand and dues of irrigation charges, any damage to the irrigation system, status of progress of works on irrigation system etc. can be shared with all members of WUAs with very low expenditure and without any delay. Each member will get information at his home and hence all expenses as well as time spent is saved as there is no need for the farmer to visit house/village of the WUA President or Member of Managing Committee.

Similarly, any farmer can discuss/share his problem/issue with Government official on his phone seating at his own house and hence there is no need for him to visit district/tehsil level office. This will save his time as well as money.

#### 4. Managing committee and general body meetings:

Meeting notice (**Figure 1**), agenda, minutes of meeting, compliances of the decision taken etc. for the Managing Committee can easily be sent to the members of Managing Committee through mobile phone. Similarly, meeting notice for General Body Meeting, agenda, minutes of meeting, compliance report, Audit Report, Social Audit Report etc. can also be sent to the members through mobile. Similarly, emergency meeting/important information can also be sent to the members immediately through mobile.

**Figure 1: Meeting Notice.**

अरनेठा जल उपयोक्ता संगम अरनेठा जिला बून्दी(राज0)  
Arneha Water users Association Arneha Distt. Bundi (Rajasthan)

अरनेठा जिला बून्दी (राज0)  
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क्रमांक : दिनांक : 7-1-2021

लोकल सूचना

सर्वे श्री संचालक मंडल के सभी पदाधिकारी एवं सदस्यों को सूचित किया जाता है कि दिनांक 9-1-2021 (शनिवार) को दिन के 12.30 बजे सम्पत्ति कार्यालय में मिटिंग का आयोजन किया जा रहा है। उक्त सभी माननीय सदस्यों से निवेदन है कि निम्नलिखित समय पर बैठक में पचासों का प्रत्येक/ सदस्य की भागीदारी अनिवार्य है।

विचारणीय विषय सूची को 12.30 बजे

1. गत बैठक की प्रमुख प्रतिक्रिया एवं निर्णयों का अंशोत्तर।  
2. आयु धारा का निष्पत्ति निर्णय।  
3. अन्य विषयों की भागीदारी एवं निर्णय।

अध्यक्ष

1. श्री राजेश जी शर्मा अध्यक्ष  
2. श्री मदन मोहन जी शर्मा सदस्य  
3. श्री राजेश जी शर्मा सदस्य 9950330540  
4. श्री राजेश जी शर्मा सदस्य 9950330540  
5. श्री राजेश जी शर्मा सदस्य 9950330540

#### 5. Financial transactions:

WUA can accomplish its financial transactions through computer/mobile with the use of Information Technology. Irrigation recovery as well as payments for the construction work etc. can be made through Net Banking. Balance of Bank Account can also be determined at any time through mobile.

Its very beneficial for the farmers who are residing outside the project area. Many farmers reside outside the State as well as outside the Country. Irrigation demand can be sent to them through computer/mobile and they can deposit the irrigation charges on line thereby reducing expenses and time for them. They can send the money transfer receipt as a proof of depositing the irrigation charges.

#### **6. Disaster management:**

WUA and members of WUA can find out information about probable attack

**Figure 2: Spray of pesticide through Drone.**



by cyclones, floods, droughts, Locust attack etc. through web portal of Government of India and State Government, other organizations, or Mobile App. This information can be further used by the farmer to minimize damage to the crops.

#### **7. Weather forecasting:**

WUA members/farmers can get information about weather of the region through mobile for the next week. Government of India, State Government, and many NGOs/organizations are also providing weather forecasting as well

as Advisory for the farmers. Generally, information on Rainfall, Temperature, Humidity, Wind Speed and direction etc. is available on website and can also get on his mobile through SMS. With the help of weather forecasting, farmer can plan his important activities for the crops in advance.

## 8. Advisory for agriculture:

Government of India/State Government, other organizations etc. are providing advisory and technical advice for the farmers related to agriculture like selection of crop selection, seed selection, seed treatment, diseases, infection by insects/pests, when and how much to irrigate, use of fertilizers etc. through web portal or mobile.

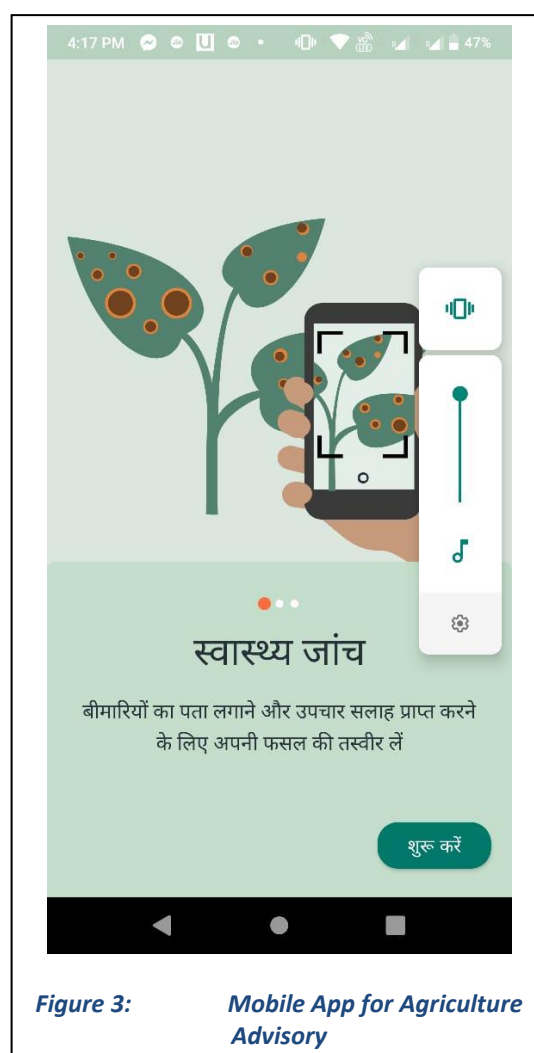
Incase of any disease or attack by any insect's farmer can take picture of his crop and can send to scientist/experts for proper technical advice/treatment through mobile.

## 9. Crop insurance:

Farmer can have crop insurance for his crops through web portal or mobile apps and incase of any damage, farmer can send image of crop damage to the Insurance Company for the claim.

## 10. Information through satellites:

Government of India/State Government and other agencies are providing information on weather, crop status, disaster, diseases, irrigation requirement etc. through Remote Sensing using Satellite Imagery.



**Figure 3:** *Mobile App for Agriculture Advisory*

## 11. Training:

Farmer can get training and additional technical knowledge through web portal or mobile app. Now a days, on line education, training, latest information on various subjects is provided through web portal/mobile apps.

## 12. Market price of agriculture produce:

Information on market price of various agriculture produce in the country is available now a days on web portal

<https://enam.gov.in/web>,


<https://agmarknet.gov.in> and other web sites.

Any farmer can refer these websites through a computer or mobile to know the market price of agriculture produce and can earn maximum income by selling his produce at appropriate place.

A screenshot of web portal for market price is given below (Figure-5):




Figure 5: Web portal for market price



GOVERNMENT  
OF INDIA

Small Farmers' Agribusiness Consortium  
Department of Agriculture, Cooperation & Farmers' Welfare  
Ministry of Agriculture and Farmers' Welfare, Government of India





राष्ट्रीय कृषि बाजार  
NATIONAL AGRICULTURE MARKET


Call us 1800 270 0224      Languages English ▼


Registration ([https://enam.gov.in/NAMV2/home/other\\_register.html](https://enam.gov.in/NAMV2/home/other_register.html))


Login Here (<https://enam.gov.in/NAMV2/faces/infrastructure/SLogin.jsf>) ☐ ☐ ☐ ☐


 Commodity (<https://enam.gov.in/web/commodity>)


 State Unified License (<https://enam.gov.in/web/state-unified-license>)

 Mobile App (<https://enam.gov.in/web/mobile-app>)

 Price Details (<https://enam.gov.in/web/dashboard/trade-data>)

 Incentives (<https://enam.gov.in/web/incentives>)

 Success Stories (<https://enam.gov.in/web/success-stories>)



The banner features a background image of a large agricultural market with many sacks of grain. In the center, there is a large green circular logo with a white 'e' and 'NAM' inside, surrounded by a yellow border. To the left of this logo is a gold circular seal with '5th' in the center and 'ANNIVERSARY' written around it. Below the seal, it says 'Celebrating 5 successful years of e-NAM'. To the right of the central logo is a circular arrangement of green icons representing various agricultural activities: a person, a tractor, a plant, a leaf, a gear, a person, a person, and a person. In the top right corner, there is a logo for 'SFAC' (Small Farmers' Agribusiness Consortium) with the text 'राष्ट्रीय कृषि बाजार' and 'e-NAM'. In the bottom left corner, there is a logo for 'NAGARJUNA' with the text 'NAGARJUNA' and 'NAGARJUNA'.