



C2 REVEALING GOOD PRACTICE

Local record keeping on environmental change

At a glance

- Encourage the community to think about what is changing in their environment and why record keeping is important. You could ask people to draw pictures of how the environment used to be and how it is now. Ask them about changes in the numbers of trees, insects and wild animals in the area, and changes in people's health and livelihoods. Ask them how often floods, droughts or other disasters take place.
- Explore what record keeping already takes place within the community.
- Discuss why record keeping is important.
- Ask the group to suggest different things they could measure. Encourage them to decide what they wish to measure and record.
- Discuss how often they want to measure and record the information.
- Ask what they could do with the information they record.
- Where possible, try to build on something the community is already doing such as keeping vaccination records, financial accounts or records of crop types and yields. Try to make record keeping part of an existing activity such as school lessons or within the activities of health clinics or shops.
- Help the community to decide who should be responsible for record keeping, and how and when they should do it.
- Makes use of local people's skills and knowledge.



Why use this tool?

To help a community to understand how their environment is changing and to plan what to do in response.



A brief description

This tool encourages groups to use simple charts to measure how different parts of the environment are changing over time, for example, water, trees, vegetation, pollinating insects.

Awareness-raising

Children & youth

Climate & environment

Conflict & peace-building

Corruption & governance

Disaster risk management

Discrimination & inclusion

Food & livelihoods

Gender & sexual violence

Health & HIV

Influencing decision-makers

Migration & trafficking

Water, sanitation & hygiene



Time taken

It may take up to an hour to introduce this tool to the community. The group will need to think about which parts of the environment are changing, then decide *what* they are going to measure, *how often* they will measure these things, and *who* will be responsible. Measurements will then need to be taken regularly by the community.



Keys to success

- **Ensure the records are relevant to the community.** Environmental record keeping will only be successful if the community is recording something that is really important to them. People may already keep records of children's vaccinations because this helps them to be sure that they won't get sick. Similarly they may want to keep records of, for example, floods, droughts or crop failures in order to prove to the government or an industry that there is a real problem that they should help the community to fix.
- **Build on existing activities.** Explore whether it is possible to develop record keeping as part of a school activity, or a farming activity, or within the activities that health clinics or local shops already carry out. This may make record keeping easier. It will also ensure that everyone knows who is responsible for keeping the records and where the records are stored.
- **Makes use of local people's skills and knowledge.** For example, goat herders may be best placed to keep records on biodiversity, fishermen on fish stocks and health clinics on disease outbreaks.
- **Participation.** Ensure participation of men, women and children. Ensure this is genuinely a local community activity or records are unlikely to be kept over time. Makes use of local people's skills and knowledge.



What to do

What environmental changes are we experiencing?

Encourage the community to take an interest in what is changing in their environment and why record keeping is important. Here are some questions you could ask:

- What changes have you seen in your environment? (For example, changes in water quantity or quality, or changes in the weather, forests, plants, animals, crops and livelihoods.)
- Is the frequency (how often) or severity (how serious) of floods, droughts or other disasters changing?
- Have these changes affected you in any way?
- Do you think anything needs to be done about these changes?

If people find this difficult, you could ask them to draw pictures of how their environment used to be and how it is now. See **Tool A2 – How is our environment changing?**

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What record keeping already takes place?

Ask the group whether anybody within the community keeps any records. If they do, consider these records as a starting point for any other record keeping. Also think about building on these records if they are relevant to other actions or changes the community wants to see.

If the community doesn't keep records, ask them what they think of the idea of keeping records. Try to encourage them that record keeping is not a difficult task. Ask them what records their community does keep, for example, children's vaccination records, school attendance records, and records of crop yields or market prices.

Why is record keeping important?

Ask the group the following question:

- Why may it be good to keep records of things in our environment?

You could ask people to discuss this in small groups of two or three people for about ten minutes. Ask the small groups to elect a representative to feed back the main points from their discussions to the wider group.

It is important for a community to understand how their environment is changing, so they can think about how this may affect their future. This will help them to plan how to do something about it. Local records can also provide helpful information for activities such as farming or managing water supply. They may also be useful in discussions with the local government about plans that they have. Environmental records are only useful if they extend over five or more years. Ensure the community is aware of this so they know what they're committing to.

What things could your community measure and record?

Ask the group to suggest different things they could measure. You may need to provide suggestions to help get them started. Here is a list of things you could suggest measuring if they are relevant to your context:

- temperature or rainfall levels
- animal and bird migration or loss
- crop yields or failures
- the number of plant or tree types that exist
- floods – how long they last and the damage they cause
- landslides – how often they happen and how much damage they cause
- droughts – how long they last and the impact they have
- wildfires – area burned

Encourage the group to suggest these things themselves. Only suggest any if people are finding it hard to come up with a list, or if they have left out any key ones at the end. Help the group to decide which of things they would like to measure. It's not usually practical to measure more than two or three things over a long period of time.

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Discuss with the group what they might do with this information when they've recorded it. For example they may use rainfall records to ask the local government to help them provide new water supplies or drainage.

How often will your community measure and record things?

Next ask the group to decide how often they would like to measure these things.

Temperature and rainfall measurements would need to be taken daily or weekly. Counting the number of bird species or plant species could be done once every six months. Other things such as yields would need to be measured at harvest times. Events such as floods and droughts can only be recorded as and when they happen. You may need specific tools for this such as a rain gauge, tree identification chart, or bird nets and rings.

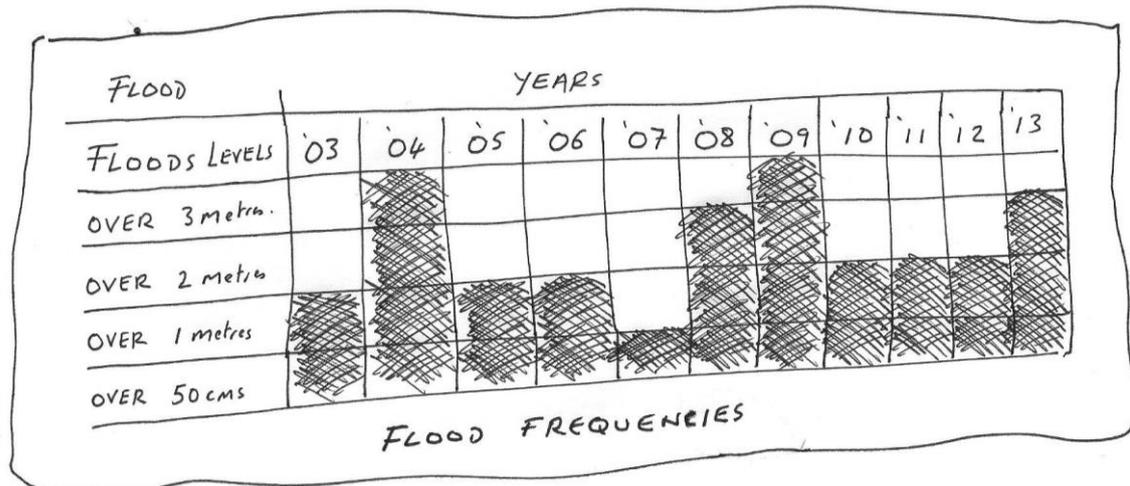
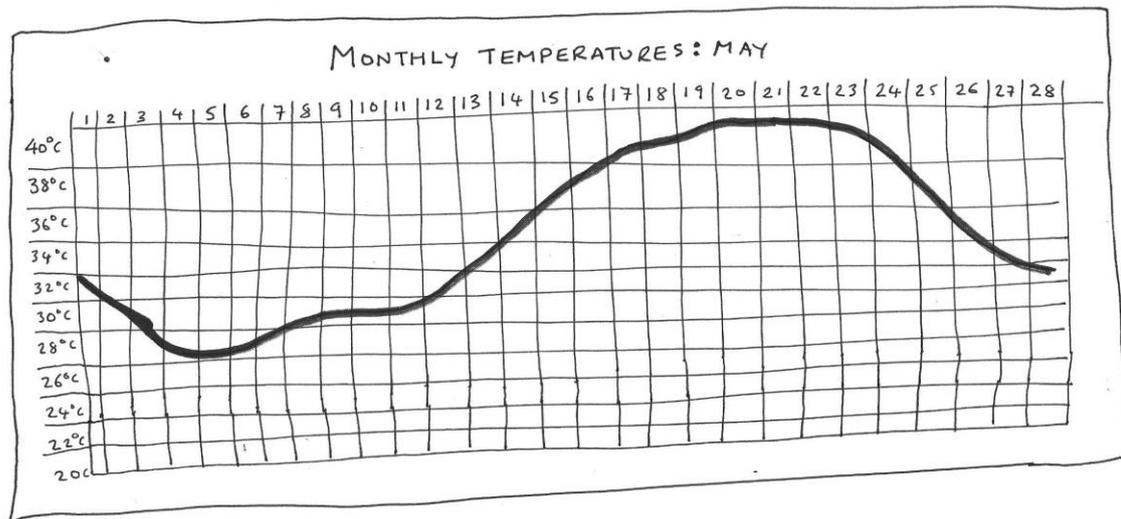
Who will be responsible for record keeping?

Help the community to decide who should do this. Could some records be kept by local schools? Or perhaps specific community groups such as farmers' or fishermen's associations could be responsible, or the health clinic? It is important that at least one person is made responsible for measuring each specific thing. Suggest that the community reviews these records regularly to see how things are changing.

Here are some examples of environmental record-keeping:

TREE SPECIES	1995	2000	2005	2010	2015	2020
MAHOGANY (<i>Khaya grandifolia</i>)	950	710	597	550		
IROKO (<i>Chlorophora excelsa</i>)	476	410	402	293		
EBONY (<i>Dispyros mespiliformis</i>)	561	524	302	207		
COCOA	2500	2950	3010	3020		
OIL PALM	3005	3024	3072	3098		
TOTALS	7492	7618	7383	7168		

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Finding out more

- Tearfund (2008) *Roots 13 – Environmental sustainability: responding to changes in the environment and climate*
http://tilz.tearfund.org/~media/Files/TILZ/Publications/ROOTS/English/Environmental%20Sustainability/ROOTS_13_E.pdf
- Tearfund (1994) *Footsteps 20 – Our environment*
http://tilz.tearfund.org/en/resources/publications/footsteps/footsteps_11-20/footsteps_20/
- [wikihow.com/Build-a-Rain-Gauge](http://www.wikihow.com/Build-a-Rain-Gauge)

Related tools:

- A1 – Revealing environmental degradation: information for facilitators [A1: *Climate & environment-2*]
- A2 – How is our environment changing? [A2: *Climate & environment-5*]
- A2 – Mapping our past, present and future environments [A2: *Climate & environment-6*]
- B – Caring for God's world (Bible study) [B: *Climate & environment-2*]
- B – Caring for our environment (Bible study) [B: *Climate & environment-3*]
- B – Stewardship of the land (Bible study) [B: *Climate & environment-4*]
- C2 – Conservation agriculture [C2: *Food & livelihoods-5*]
- C2 – Developing rural home gardens [C2: *Food & livelihoods-8*]
- C2 – Developing urban home gardens [C2: *Food & livelihoods-9*]