

# Seasonal Calendar

What is it?

A seasonal calendar helps to explore the seasonality of events in a community over a one-year period. It can be used to show typical hazard patterns including when hurricanes, floods, droughts or diseases normally occur, when social and economic conditions including 'lean periods' and seasonal labour migration take place, and public events such as holidays and festivals, occur, and identify how the correlation between the different events might increase risks.

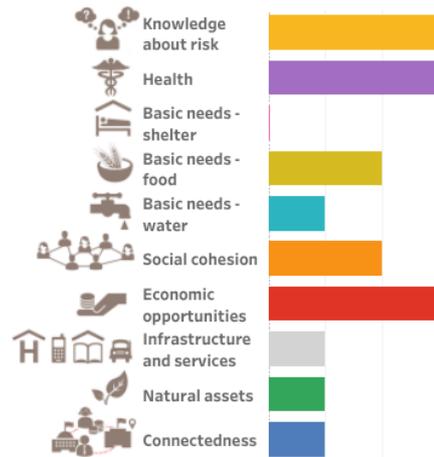


1-2 hours



Paper and pens and flipcharts or PC/ tablet (Excel) and projector.

**Resilience characteristics covered:**



<b>Social</b>	J	F	M	A	M	J	J	A	S	O	N	D
Low income -Residents; Farmers		Increase in wages							Increase			
		Seasonal Employment										
Migration / Scholarship							Travel					
Burglaries							Drug Use					
Alcoholism	Domestic violence											
	J	F	M	A	M	J	J	A	S	O	N	D
Flu, coughs, colds												
High stream and pipe water flow												
Red Eye												
Skin Problems												
	Diabetes/Hypertension											
	J	F	M	A	M	J	J	A	S	O	N	D
Dry and <u>Wet</u> seasons	Dry					High Wind/Rain						
						Hurricane season						
										Landslide risk		
	Earthquakes/Volcanic Eruption											
	J	F	M	A	M	J	J	A	S	O	N	D
School Break			Hols				Holidays					Hols
La Rose												
La <del>Magrite</del>												
RC Carnival												
Carnival												
Jazz Festival												
Creole Festival												
<del>Babonneau</del> Day												
Christmas												
Independence Day												

Example from VCA in Babonneau, Saint Lucia Red Cross.

A matrix is created with the months of the year (or locally appropriate time periods) as columns, and the events, hazards, activities and other phenomena significant to the community listed in the rows. Completion of the matrix helps to see when hazards, risks and vulnerability usually overlap. The analysis can help a community to rethink its routines according to its vulnerability to hazards. Keep in mind that the timing of some events, differs from year to year and that certain festivals and religious observances such as Ramadan fall on different dates each year.

Use it to...

- **Find** out what activities take place in different seasons.
- **Identify** people's workload at different times of the year and the division of work between men and women in the community.
- **Compare** variations in availability of resources through the year, such as food, water and income. **Examine** how seasonality of events is changing over time.
- **Identify** the correlation between different events and reflect in the analysis how it might directly impact on risks
- **Recognize** the best time for the community to implement a project.

Tool additional considerations

This tool has been revised to include basic aspects related to gender and inclusion, climate change, livelihoods and health. If you want to understand these considerations more in-depth we have compiled additional considerations [here](#). These should be read and used as a complementary note to the steps described below.

How to do it

### ***Step 1. Determine who will participate***

One group or several smaller groups?

- Depending on the community's context it may be important to separate the community for this exercise into groups to promote participation and understand different perceptions by comparing seasonal calendars drawn by men, women, children, disabled people or other groups.
- If participants are separated into groups, it is important that there are appropriate facilitators for each group, a woman for the women's group for example.
- Make sure you engage people with impairments to ensure their participation.
- It may also be helpful to split younger and older people to compare "now" to '20-30 years ago'. It will allow the identification of how livelihood activities like planting and harvests are changing, new weather patterns and health-related hazards are emerging or appearing at unexpected times of the year.



**Step 2. Select the materials to make the calendar.**

Seasonal maps can be drawn on ‘anything’: the ground using seeds, sticks, coins and other locally available materials; with pens on large flip charts or typed/drawn on a tablet or PC in Excel and projected on the wall (see example [here](#)). To be able to refer back to the information at a later stage, it is useful to save the final product digitally, take a photograph, or both.

**Step 3. Set the timeline for the calendar.**

Decide how long the calendar will be for (at least a year) and decided the time intervals: these can be the months of the year, lunar dates, or seasons such as a dry period and a wet period. Start with what people in the community consider to be the beginning of the year according to their calendar; it does not have to be January. The starting point may coincide with the harvest season, the rainy or dry season or certain key celebrations. Time intervals are drawn as columns across the top.

**Step 4. Determine the events to be added to the calendar.**

The events should be listed in a row on the side. There is a wide range of information that could be collected as “events” including:

- Weather: Seasons, times of hazards and threats
- Disease and epidemic outbreaks
- Livelihood activities: Times of heavier work load, crop and livestock production like planting and harvest time, lean season, seasonal migration, income generating activities
- Times of surplus and food deficit
- Social events, festivals, religious celebrations, holidays and periods with an increase in expenditure levels such as weddings or school fees

Make sure to capture different roles, responsibilities and workloads for men, women, children and elderly.

This information can be collected all at once or by first focusing on the timing of hazards and threats and then adding other ‘events’ that will then highlight vulnerabilities (e.g. harvest season falls during the flood season) and capacities (e.g. income generating activities or remittances during the typical lean season).

**Step 5. Consider changes over time**

For each event, draw double lines to create two rows – one for the present and a second one for the past (10-30 years ago). This will show whether seasons and other social economic

events are changing which may have implications for health problems, disasters and livelihoods. It is not one past event, but patterns in the past that you are looking to document in the seasonal calendar.

**Step 6. Determine values**

Invite participants to mark the timing of the events in the calendar. If it is difficult to capture precise information, start with general information, such as when is the peak of the rainy season and when is the peak of the dry season. Different levels of ‘intensity’ can be marked by, for example through the size of a symbol/drawing, or the numbers of Xs, a digit or different colours (see example below).

**Step 7. If different groups were made, bring the groups together to discuss the results**

Facilitators should discuss with each separate group the key issues before bringing the community together again. Then different calendars must be brought together to discuss the differences and similarities between women, men, disabled and other groups. This will create a discussion around different perceptions and priorities which will support the development of solutions in the community.



**Example of seasonal calendar comparing past and present seasonality**

Events	When	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
High Temp.	Past	••	•••										
	Present			•••	••								
Drought	Past	••											•••
	Present			•••	•••								
Rainy Season	Past			••	•••								
	Present				••	•••	•						
Strong Wind	Past	•											•
	Present	••											••
Landslide	Past				•	•							
	Present					•							
Farming	Past			•••	••	••			•	•			
	Present				•••	••		•	•				
Animal Diseases	Past			•••	•••								
	Present	•••	••										
Human Disease (Diarrhea etc.)	Past			•	•					•	•	•	•
	Present		•	•						•	•		
Mosquito Bite	Past				•								
	Present				•••	•••							

Red Cross and Red Crescent Climate Centre

### What does this calendar tell us?

Seasonality have changed for all events - in some cases considerably. For example, mosquito bites have increased a lot which may be an early warning to prepare for combating vector-borne diseases in the future. And the drought periods and rainy season has shifted, affecting flood preparedness planning and water harvesting activities.

### Step 8. Discuss and analyse



- a. **Start your analysis by comparing** the seasonal calendar information with the information collected during the review of secondary sources, community meeting or ranking.
- b. **Cross-check** the information in the calendar, for instance:
  - Do the start and end points of crop seasons coincide with the local rainfall data? Do the changes in season correlate with climate variability and climate change observation data?
  - Do peaks in labour demand and high-income months coincide with these periods?
  - Do prices go down at harvest time?
  - How do these effects differ according to gender and age?

- c. **Analyse** the seasonal calendar by looking for links between different parts:

You may find information that characterises the **hazards** and **threats** such as;

- How do hazards impact the community's economic situation?
- When do hazards occur throughout the year? Have any changes been observed in this from the past?
- What is the relationship between the wet and dry seasons and times of human/animal diseases?

You may also find information about the **vulnerabilities** to different hazards and capacities with in the community;

- When is their workload heaviest?
- What is the relationship between food shortage and migration and between climate and disasters?
- Which factors/events have changed seasonality and/or intensity? If such changes would continue, how could that be considered in planning of resilience interventions?

- d. **Reflect** on and **organise** the results of your analysis in terms of the resilience characteristics (knowledgeable about risks, health, needs, social cohesion, economic, infrastructure & services, natural assets and connectedness) in relation to the hazards and the exposure. See below as an example.



<b>Resilience characteristics</b>	<b>Coverage of characteristic by tool</b>	<b>Example of information that can be collected</b>	<b>Vulnerabilities identified</b>	<b>Capacities identified</b>
Knowledge about risk		Times of hazards/ threats (flooding, drought, hurricanes etc.)		
Health		Times of disease outbreaks/epidemics, cold/flu season, heat waves, etc.		
Basic needs – shelter		Time to repair houses (e.g. re-roofing)		
Basic needs – food		Time of Lean season, harvest season, food surplus		
Basic needs – water		Time of water shortages, water harvesting		
Social cohesion		Social events, festivals, holidays, schools break, seasonal migration, times of stress, times of violence/ security risk		
Economic opportunities		Times of livelihood activities such as planting, harvests, trade, seasonal migration, income generating activities, different workloads of men and women over the course of the year		
Infrastructure and services		Time for infrastructure maintenance (e.g. fire walls, repair to drainage systems, roads etc.		
Natural assets		Time for tree planting, closed fishing/hunting period, time for forest product collection, etc.		
Connectedness		Time of local council planning and budgeting, election time, community meetings, etc.		

### **Variation: 24 Hour Clock**

In addition to a seasonal calendar, you can also scale it down to a **daily activity calendar**. A daily activity calendar is used to document the various activities of an individual over the course of a day and the duration of each activity. This tool can be used, for example, to identify the **different tasks performed by men and women** and when they do them. In urban areas it can also document urban citizen's **mobility** and tasks at different places during day and night time, issues of safety and differences by age, gender and livelihood groups. The information can also be useful for knowing when best to **schedule meetings or activities**.

Discuss:

1. At what points during the 24 hours' time period do you feel the least safe (mark this on the clock), what do you feel impedes your safety?
2. What parts of the day are most important for your livelihood? How does this change throughout the year?
3. Are there points of the day where you are available for social activities (mark this on the clock)?

**Example of a women daily activity calendar from Lebashirik Village, Kenya Red Cross:**

<b>Time</b>	<b>Activity</b>
5.00 am- 5.10am	Time to wake up and light fire wood
5.10am- 6.00am	Milking of the livestock
6.00am- 6.20am	Make tea for school going children and herders
6.20am- 7.00am	Separate young calves and goats kids with their mothers and cleaning of Boma
7.00am- 10.00am	Going to fetch water
10.00am-12.00nn	Prepare lunch for the husband and small children at home
12.00nn-1.00pm	Make beads and wash clothes
1.00pm-5.00pm	Fetch fire wood
5.00pm-7.00pm	Fetch water
7.00pm-7.30pm	Milking
7.30pm-9.30pm	Prepare supper and serve
9.30am-11.00pm	Wash utensils, making stories and going to sleep
1.00am-2.00am	Wake up to milk the camels and going back to sleep