

# Island Sleuthing: from floods to food

Continuing the 2014 biodiversity series for IY Small Island Developing States in Otherways by Jeanie Clark

Did you hear any news about Honiara, Guadalcanal, the Solomon Islands recently? As I plan this article, the radio is talking about this part of the Earth. Perhaps you heard it too, or something on the TV, or in the papers? Perhaps you know the name from its importance in WWII? Perhaps you remember hearing about the Solomon Islands a year ago when a cyclone hit? Whatever your knowledge now, could it be more?

In the last edition of *Otherways*, I reported that the first aim of the 2014 International Year of Small Island Developing States (IYoSIDS) is improving awareness of the SIDS – culture, environment, sustainability issues and options. I also introduced the SIDS slogan, “*island voices – global choices*”, and suggested that if we were going to improve our knowledge of such places that it might involve ‘*island sleuthing*’ - searching for the enriching and positive information from island communities and experiences to go beyond the disasters likely to be reported in the media.

So, what do you know of Honiara, Guadalcanal, the Solomon Islands? What is your knowledge based on? Let’s use this for an example for a SIDS sleuth investigation, and assume the SIDS suggestions in the last article have been done. This article will extend on those activities. This could be adapted then for any other SIDS chosen.

## Flood stories

If the starting knowledge is solely media-based about a disaster, then explore understanding of that experience early. So, if sleuthing the Solomons, chat about what happened when you or someone you know went through a flood, for first-hand experiences. Especially consider things like:

- **before** the flood arrives - warnings given by the rainfall event itself and by the emergency agencies. If you don’t have personal experience, you might like to read Nan Bodsworth’s delightful children’s book *Mike’s Bulldozer and the Big Flood* (1994).
- **during** the flood – moving water’s sound and colour and speed, response of creatures, things under water or swept along, weather, defences. eg photo right, blue skies over ripe wheat lost in water.
- **aftermath** – food lost, the smell, the murk left behind, Nature, eg photo right ant ‘volcanoes’ in sunshine



## Observation

As science, during the next very heavy rain event, observe

what happens. Look and listen for nature’s preparations and response. If you grow food plants, notice especially the aftermath there. This will give some ideas into possible effects on food production.

Media (eg headlines at the bottom of this page) tends to focus on people saved and killed, surviving and damaged infrastructure (buildings and transport installations), and animals stranded, but less often on food gardens, the response of nature, and long-term recovery. We may hear only of Australia immediately responding eg with ‘emergency biscuits’ and supplies.

## Travel plans

What if we were to go there to report ourselves? Simulate a journey to your SIDS using geographic skills in instructions for a journey. Use distance and directions, preferably with the aid of an atlas, not Google Earth! For example,

- Come journey with me ... (*find an atlas*)
- It is a long way from here, into the Pacific. (*find a map with both Australia and the Pacific Ocean*)
- We will get to Melbourne first – e.g. travel some 300 km southeast. (*Find where you are in Australia, and use the linear scale with a piece of paper to check direction and distance skills. You can draw a n-s-e-w arrow on a piece of paper and stick it on the map page – north is always to the top in an atlas. To use a linear scale, take the side of a piece of paper and copy the marked line scale markings on the map onto it, slide it along and repeat, so that a 2000 km linear scale can then show multiples of 2000 km. Then place that paper between start and end points, to read distances.*)
- We will fly NNE- north north easterly. (*Place one point of the paper on Melbourne, and twist it through east, north east to north north easterly*)
- We fly over Australia to a capital city about 1300 km away, and then beyond. What is it? (*Brisbane*)
- We fly some 2200 km over the sea of... (*Coral Sea*)
- We are just into the Pacific Ocean and land in an island of the country of... (*the Solomon Islands*)
- We are now much closer to the Equator, at a latitude of about ... (*Latitude lines run across the page : Solomons is near 10N, Equator is 0*)
- We will pack for a different climate. How different? Use a map of World Climatic Regions - Koppen’s classifications. Melbourne is Cfb, the SIDS is (Af)
- Look on the key to sleuth the meanings of these codes. The C is for a “Temperate Rain” climate with summers and winters, f is for monthly rain over 60mm, and b is for a warm summer. The Solomons has an A for ... (*Tropical rain*) with winter temperatures that are ... (*warm*), so it doesn’t matter what month, pack summer clothes!

## Brainstorms

On a blank sheet of paper write the SIDS capital, island name and country and then add as many words, or phrases, or pictures to document what is known right now. This is my son’s for the Solomons.



Check this for concepts of the environment (land, water, climate, living things, infrastructure) and people, culture (e.g. WWII, agriculture), and so on. Use the concepts that are not ticked to guide your sleuthing into having a better understanding of a SIDS. For those ticked, you may/not decide to discover more.

### Landform

Let's take the landform – it's like the backbone of a person. My son knew that Guadalcanal was mountainous, but not the rest of the Solomons. Where can we sleuth that information from? I like to start with atlas maps! (If you don't own one, look for one in a library, and the country's tourist guide book too.) Standard colours on the *Physical* maps show landform by height of land and depth to sea floor. If you don't have an atlas or library access, then [worldatlas.com](http://www.worldatlas.com) is useful for region and country maps, facts and figures.

Look first at a *Physical* map of Australia. Much of the east is green, under 200 metres – it's the Murray Darling. Much of the west is yellow-brown, 200-800 metres – much of our dry interior is on higher land. Notice the level of most the Great Dividing Range!

Compare this with a Solomons *Physical* map. Same colours, so sleuths can see many mountainous islands, with less lower land, and the sea dropping down quickly to greater depths. How many more islands? Use the Tourist Guide book or encyclopaedia!

Make some comparisons between Australia and the SIDS e.g. the Solomons is:

- 1 made up of nearly 1000 islands, (Name our islands!);
- 2 of which only a 1/3<sup>rd</sup> is habitable. (How much of Australia is habitable?);
- 3 It has a maximum length of almost 1800 KM (Find two Australian cities about that far apart);
- 4 Its highest point is almost 2500 m (Find ours for Mt Kosciusko);
- 5 It also has a varied landscape from forested hilly larger islands to the smaller sandy flat low atolls.

*Google Earth* Satellite views' colours show ocean floor depth and plant density on land, or else soil colour, not the height of the land. Triangles mark mountain peaks.

### One Island

Select the one island which has been in the news, in this case *Guadalcanal*. What shape is it? (A fat worm? A wavy line?) Sleuth from its satellite view in *Google Earth*, to see: its dark green (mainly forest cover); lighter green patches on the north central coast (agriculture); crinkly light lines (rugged hills and streams); and Honiara on the widest north coast bay.

Put some muscle on the backbone, with landscape

sleuthing! Choose 'photos' from *Google Earth's* menu for an array of large and small photo boxes. Click on a box and a photo appears. Zoom in for many more photos. From this, sleuths can get a feel for the *island voice* e.g. "Rugged Highlands", "Coconut Plantations".

Sleuth the origin of this landscape from a travel guide book or on-line e.g. <http://www.travelguide-en.org/> (eg "Solomon Islands: Equatorial Forests and Volcanoes"). What do *volcanoes* mean for soil fertility? It's as good as you can get naturally and its nutrients wash down in rivers, making floodplains very fertile too. What does that mean for vegetation? Plants grow well, creatures too living on them, creating its unique *biodiversity*, often named in travel guides, eg above.

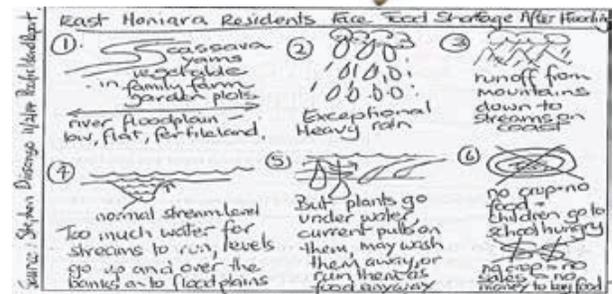
Put skin on the muscle with cultural sleuthing. A comprehensive source is [www.everyculture.com](http://www.everyculture.com), giving an introductory '*Island Voice*'. Using its "food and economy" section, let's continue with the people side of plant diversity to find what people grow in this good soil. It reports local staple foods as yam, pana and taro. Are these foods new to you? Sleuth on the web for what these staples look like, their food value, growing seasons and problems.

A benefit of *biodiversity* is indigenous crops suited to local conditions. Local SIDS food plants offer a '*global choice*' for improving food security. 300 such plants are listed in "*Food Crops of the Solomon Islands*" (by B. R. French, found at <http://www.learn-grow.org/>) that are better for soils and food value than 'western' crops.

How are these plants typically grown? Like many Pacific countries, fertile soils and plentiful rain enables *slash and burn* or *shifting agriculture* models with small *family farms*. Food plots, from forest around villages, are used for a couple of seasons, then left for several. Family farm food gardens are often in urban areas too.

When these gardens flood, hardship follows. A web search will locate both local and international paper reports on floods. What do they report about food gardens? The locals are more likely to report on their losses and their effects, giving us an *island voice* e.g.

Fill the gap in our media by making your own report from these, e.g. the diagram below is based on S. Disango's report when 762 family food gardens were lost in February's flooding.



By learning more of this SIDS, we found a local *island voice* and *global choices* for food security and family farming (another IY2014). What else can you find?