

Fields That Rise With the Flood

PASSAGE · NON-FICTION

SKILLS TRAINED

Working memory

Delayed recall

Critical analysis

HOW TO USE THIS SHEET

About 25 minutes

- 1 Read the passage twice, slowly. Take about seven minutes.
- 2 Turn to the next page and cover this one. No looking back.
- 3 Write what you remember, then mark it on the last page.

In the south of Bangladesh there are districts where the water does not drain away for months. Rivers back up, fields disappear, and the land that farmers own is simply not available to them from roughly June to October. In Pirojpur, Barisal and Gopalganj the answer has been the same for generations: if the field is under water, build a field that floats.

The raft is made of what the flood brings. Water hyacinth is the main ingredient — a free-floating weed with a thick spongy stalk that holds air and rots slowly — piled up with duckweed, algae and paddy straw. Two people work from a small boat, raking the weed into a long windrow and treading it down until the mat is about a metre thick, perhaps a metre and a half wide and anything up to fifty metres long. A bamboo pole runs down the middle to keep it straight. The whole structure is buoyant enough to stand on, and because it is tethered rather than fixed it rises and falls with the flood instead of being drowned by it. Built properly, a bed will carry a grown adult walking its length, though it gives underfoot like a mattress.

Seedlings do not go straight into the weed. The grower makes *dhap* — balls of rotted hyacinth and coconut fibre, each about the size of a fist — sows the seed into them, and keeps them in the shade until they germinate. Only then are the balls pressed into the surface of the raft. Okra, gourd, cucumber, red amaranth and spinach are grown on the beds, along with huge numbers of tomato and aubergine seedlings, which are not eaten at all but sold on to dry-land farmers for planting once the water has gone.

Nothing is left over. When the flood recedes in late autumn the raft is cut up and dug into the exposed soil, where it works as compost for the dry-season crop. The following June a new one is built from a new flood's weed. The system has no fertiliser bill, no pesticide bill and no irrigation, because the bed sits on the water it drinks. A grower with several beds works them in rotation, cutting one up while another is still cropping.

In 2015 the United Nations' Food and Agriculture Organization recognised the floating gardens of Bangladesh as a Globally Important Agricultural Heritage System, one of a

small number of traditional farming methods listed worldwide. Since then the beds have appeared in development reports, conference slides and a good deal of writing about how farming might cope with rising water.

That enthusiasm needs testing. The method is genuinely ingenious, but it is also narrow. It requires standing water that is fresh, fairly still and roughly waist to chest deep, which rules out tidal creeks, fast channels and anywhere the water turns salty. It requires water hyacinth in bulk, and in some areas there is now less of it than the beds need. Above all it is slow, wet, back-bending work: building and maintaining a bed takes far more labour per kilogram of vegetables than a dry field does, and in districts where young people leave for city work the beds are tended by fewer and older hands each year.

So there are two honest ways to describe the same practice. One is a model worth exporting — a low-cost, low-input answer to flooding that many wet regions could copy. The other is a local solution of unusual elegance that fits one set of conditions exactly and loses most of its advantages anywhere else. Which description a reader prefers tends to depend less on the beds than on what they wanted the beds to prove.

- 5 How does the writer's tone change between the first four paragraphs and the last two, and how is the shift signalled?

- 6 Weigh up the claim that the floating gardens are “a model worth exporting”. How strong is it on the evidence given?

- 7 The passage ends by saying a reader's preference “depends less on the beds than on what they wanted the beds to prove”. Evaluate that as a criticism of how such examples get used.

PART C Mark your own work

Now go back to the passage. Tick every answer you got right. You do not need the same words as the answer below — if you wrote the same idea in your own words, it counts.

- ☐ 1 • They are built mainly from water hyacinth, piled with duckweed, algae and paddy straw. A finished raft is about a metre thick.
- ☐ 2 • Because the flood level changes through the season. A tethered bed floats up and down with the water and stays at the surface, whereas anything fixed to the riverbed would be submerged as the level rose and the crop would drown.
- ☐ 3 • Because the surface of the raft is coarse, waterlogged weed, which is a poor place for a seed to germinate and easy for it to be washed out of. A fist-sized ball of rotted hyacinth and coconut fibre holds the seed in a small pocket of workable material and can be kept in the shade until it has sprouted, after which the young plant is strong enough to be pressed into the bed.
- ☐ 4 • Narrow means it works only within a tight set of conditions — fresh, still water of the right depth, plenty of hyacinth, and plenty of labour. Limited would suggest the method itself is weak or does not achieve much, whereas narrow concedes that it works very well indeed, just in very few places.
- ☐ 5 • The opening is admiring and concrete, explaining the method as something that plainly works, with details such as the bamboo pole and the beds becoming compost. The last two paragraphs turn sceptical and evaluative, and the shift is signalled by the blunt sentence “That enthusiasm needs testing”, after which the writer lists requirements and costs rather than achievements.
- ☐ 6 • In its favour, the system needs no fertiliser, no pesticide and no irrigation, uses a free and abundant weed, produces food and saleable seedlings during months when the land is useless, and feeds itself back into the soil afterwards — a strong record for a method with almost no capital cost. Against it, the conditions it depends on are specific: fresh, still water of a particular depth, hyacinth in bulk, and a large supply of patient labour, all three of which are absent or declining in many places that flood. The claim is therefore defensible as an argument for studying the beds and copying their principles, but weak as a prediction that the beds themselves will transfer.
- ☐ 7 • It is a fair criticism and the passage earns it, having shown that both descriptions rest on the same facts: the same low input costs that make the beds look like an exportable model are inseparable from the local conditions that make them hard to export. The sentence identifies a real habit — a practice is adopted as evidence for a position already held, and the details that do not serve that position quietly drop out, which is how the beds end up on conference slides as a solution to flooding in general. The limit of the remark is that it could be used to dismiss any argument as motivated, so it is better read as a warning to check which details an example is being asked to carry than as a verdict on either case.

FACTS RECALLED IN PART A

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QUESTIONS CORRECT

— / 7

DATE

THE STRATEGY Deliberate retrieval

Close the page and write out what you remember before you check anything. It will feel uncomfortable, and the gaps will be obvious, which is exactly the point: the effort of hauling a

fact out of memory strengthens it far more than seeing it again does. Mark your blanks, look only those up, and then retrieve the lot again tomorrow.

WHERE YOU ALREADY DO THIS

Think of something you can recall without looking — a phone number, song lyrics, a route. How did it get that firmly fixed, and how much of that was looking at it versus producing it from memory?

FOR THE PARENT OR TEACHER · This sheet trains delayed recall, not reading speed. Let your teenager read the passage once, then cover it completely before Part A — no glancing back and no prompting, because the effort of hauling a half-remembered fact out of memory is what fixes it there. At this level mark the thinking rather than the wording: the answers given for the inference, tone and analysis questions are one good response each, not the only one.