What is more forest worth to me?

Water

Warm Heart Coffee and Reforestation Training Program
Reforestation Primer

This series of PowerPoints is intended for use by trainers working in small, rural villages. It is meant to be simple but accurate and informative. Reforestation Primer is part of Warm Heart’s larger Educational Program for Small Farmers, a program that begins from the assumption that rural people are not only interested in the big issues affecting their lives, but want to understand them.
Why forests matter to you

• Forests matter to you because forests are essential to everything that is essential for successful farming:
  – Water
  – Soil
  – The crops you can grow
Forests provide and manage water

• *Without* forests we suffer

  ![Floods](image1.png)    ![Erosion](image2.png)

  *Floods*    *Erosion*

• *Without* forests we don’t have

  ![Water for crops](image3.png) ![Rain](image4.png)

  *Water for crops*    *Rain*
Without forests we have floods
Without forests our top soil erodes

Our best, black top soil washing away into the flood waters

See the rushing water picking up the soil and taking it away?
Without forests you end up with this!
Without forests no water soaks in

Mountain corn barely slows the water, almost nothing soaks in

What will fill the rice paddies when the dry season comes?
So what does a forest do?

Leaves break the hard rain fall into small droplets.

Roots let the water penetrate deep into the ground – and hold it like a sponge.

Water in the ground escapes slowly providing water during the dry season.
Green mulch will help – and will suppress weeds, too!

Green mulch cover crops like Brazil nut add nitrogen (N) to the soil, stop weeds and have lots of roots to let the water in.

- Helps water penetrate
- Fixes nitrogen
- Stops weeds
But planting forest above your farm is best

Forest

Coffee planted between forest shade trees

Corn planted with nitrogen fixing shade trees

Green mulch cover crop between coffee and corn plants
What do you think would help here?
What else can forests do?
Where does our rain come from?

Clouds full of moisture bump into mountains and drop their rain.

But what about places far from the ocean?

Evaporation from the ocean rises to create clouds.
That’s right. No forests, no rain.

10% of the humidity (water) in the air comes from “transpiration” (sweating) from trees.

Transpiration from the leaves of trees rises to create clouds.

Evaporation from rivers and ponds that forests keep full rises to create clouds.
Thank you for your attention

Next time we will look at:
How forests can improve the soil your crops grow in.
Reforestation Primer for Small Farmers: What is more forest worth to me?

This PowerPoint is brought to you by Warm Heart Publications.

Warm Heart is a grassroots community development organization serving the world’s 2.5 billion poorest people – rural small farmers.

Warm Heart Publications’ Educational Program publishes a wide range of simple but accurate materials for small, rural farmers. This program begins from the assumption that rural people are interested in the big issues affecting their lives and want to understand them.

Publications in the Warm Heart Educational Program for Small Farmers cover issues as diverse as the basics of soil health and plant nutrition to mitigating the consequences of climate change and how biochar works.

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Our thanks to the Forest Restoration Research Unit (FORRU, www.forru.org). FORRU is the single best source of information about reforestation and working with villagers to organize reforestation available.
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