

Preserving and Restoring Watersheds in Indonesia through Sustainable Practices



The Rejoso Kita Program
Since 2016



DANONE
ecosystem

The Challenges Across the Rejoso Watershed



The Rejoso watershed is one of Java's most important watersheds

It is home to Umbulan spring, which serves as a crucial water source for a population of 1.6 million people

Studies project
Java Island will experience
absolute water scarcity by 2040,
therefore protecting watersheds is fundamental



The Rejoso watershed is threatened due to key challenges upstream, midstream and downstream



Upstream

Pine trees
Potatoes & vegetable crops

● **Unsustainable practices**

- Land use change: converting lands covered by trees into vegetable crops
- Lack of awareness about regenerative agriculture practices: planting trees which do not retain water into the soil

● **Lack of law enforcement**



Midstream

Fruit trees

● **Unsustainable practices**

- A lack of awareness about regenerative agriculture practices: use of pesticides and excessive water use

● **Ineffective water management**

- Lack of environmental awareness among local communities
- 600+ wells flowing 24/7 drilled illegally



Downstream

Rice Paddies



Water quality and quantity directly impacted due to:



Upstream



Midstream



Downstream



- Higher number of landslides and erosion causing repetitive floods
- Decreased water infiltration rate



- Water contamination
- Unnecessary water loss



To address these challenges...



...a **coalition of public and private partners** joined forces in 2016 to structure an integrated landscape approach to protect the Rejoso watershed encompassing up, mid and downstream actions



The ***Rejoso Kita*** program was born



How it Works



Establishment of a “Watershed Forum”

to build clear governance and shared responsibility among water users, including: the Indonesian Government, communities, universities, NGOs, farmers and businesses...



Enabling to:



Engage key stakeholders



Facilitate long-term watershed planning



Secure financing



Educate communities



Publish regulations



Increase awareness on environmental protection



Up, mid and downstream farmers

join the *Rejoso Kita* program and benefit from training to incorporate sustainable practices adapted to their activities to **restore and protect** the Rejoso watershed



Tailor-made action plan

Based on a farmer's **location** and **needs**, a specific action plan is deployed, including both **environmental** and **financial incentives** to positively influence practices and behaviors

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Training on sustainable practices

Upstream



Plant grass strips

- Enhanced water infiltration
- Reduced erosion
- Increased carbon stock
- Trapped sediment

Midstream



Dig sediment pits

- Water infiltration
- Reduced erosion
- Trapped sediment
- Enhanced fruit trees productivity

Downstream



Introduce proper well design to manage water flow

- Improved water efficiency
- Avoided unnecessary water loss



Grow more trees & protect existing ones

- Enhanced water infiltration
- Reduced erosion
- Increased carbon stock



Adopt sustainable paddy cultivation

- Improved water management
- Intermittent water irrigation
- Healthier rice

2

Financial incentives

Enhancing behavior changes by increasing farmers' incomes and establishing financial rewards



- **Boost farm productivity, helping to increase and secure farmers' revenues**



- **Ensure farmers connect to higher markets:** increased knowledge to connect with buyers directly



- **Create incentives through the "Payment of Ecosystem Services (PES)" enabling financial rewards:** upstream and midstream farmers benefit from financial rewards to grow more trees, while preserving existing ones



Comprehensive support helps farmers secure their revenues and protect the Rejoso watershed

Leading to a Positive Impact on the Whole Ecosystem

Positive outcomes...



+50%

increase in productivity for more than 180 rice farmers impacting positively their livelihoods



47,000+

trees planted or preserved since the project started

... and impacts!

Environment

up to
-150%

reduction in methane emissions per HA per season thanks to **sustainable paddy cultivation downstream**

Social

1.6M

people provided with **more stable and sustainable water supply**

~14L

of **water saved** every second, the equivalent of filling 1 olympic size swimming pool every 2 days

up to
30%

additional annual gross income for **170+** up and midstream farmers (From 2016 to 2023)



"When I heard about the *Rejoso Kita* program, I did not hesitate to join the initiative. I joined the program in 2018 and I'm still implementing the practices taught to me until now. Through the program, I was trained to implement sediment pits. Thanks to the sediment pits, my durian tree, which previously yielded only 5 fruits per harvest is now producing way more, making me extremely happy. This activity enhancement has resulted in improved income for both myself and my family."

-Ngationo, Indonesian Midstream Fruit Farmer

Partners & Roles



DANONE ECOSYSTEM

Supports, structures, monitors and challenges the program

DANONE WATERS OF INDONESIA

Leads and manages the program to protect and conserve Rejoso watershed

KSP TEKUN

Enables market access and financial services for downstream farmers

KARYA MASYARAKAT MANDIRI

Owens the Orisa rice brand

RABO FOUNDATION

Provides grants and loans to downstream rice farmers

SOCIAL INVESTMENT INDONESIA

Implements the program (phase 1)

THE NATURE CONSERVANCY

Acts as a communication advisor for the program

WORLD AGROFORESTRY [ICRAF]

Acts as implementer in phase 2
Provides technical expertise
Implements the program alongside stakeholders



FARMERS

Beneficiaries and actors of the transition to agricultural practices to conserve the watershed



PASURUAN WATERSHED FORUM

Supports coordination and planning

GADJAH MADA AND MONTPELLIER UNIVERSITY

Conducts mapping for total number of artesian wells in the watershed
Provides information on the recharge area of the watershed
Provides date on the hydrogeology system

Sources:

- National Geographic Society, "Watershed", (2022) [Online] <https://shorturl.at/bILRY>
- Rejoso Kita Youtube, "GERAKAN REJOSO KITA - English Subtitled", (2020) [Online] <https://shorturl.at/cgkCE>
- Water Changemaker Awards, "Gerakan Rejoso Kita: preserving Rejoso Watershed through ecosystem service scheme, sustainable agriculture, and water efficiency practices" [Online] <https://shorturl.at/uyAGV>
- ICRAF, "Conserving the Rejoso watershed", (Sept 2022) [Online] <https://shorturl.at/mwLS4>
- Rejoso Kita Project Study Case – Produced by Technoserve (2023)