

From Livelihood to Climate Change Adaptation: Two Decades of Women's Leadership

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Key Highlights

- This retrospective impact evaluation focuses on the project implemented from 2005 to 2007 in Mithila Municipality, Dhanusha District. Almost two decades after completion, its impacts are visible.
- *Aishwarya Ban-Batika* (Aishwarya Forest-Garden) women's group fostered leadership, intergenerational participation, and transparent management, ensuring that women remain central decision-makers.
- Afforestation, bamboo plantation, and pond construction have reduced flood risks, restored ecosystems, and provided habitats for biodiversity, strengthening local resilience.
- Income from mangoes, bamboo, and fish farming has improved household wellbeing, supported children's education, and enabled year-round farming

Introduction

A site visit and group discussion were held in the third week of August 2025 with women members of the Aishwarya Ban-Batika (Aishwarya Forest-Garden), an independent group of 40 women under the Dhaneshwar Community Forest Lalgadh in Mithila Municipality, Dhanusha District, Madhesh Province, the central southern region in Nepal.

The field interaction and observation were a part of a retrospective impact evaluationⁱ, led by the author of this article.

[Janaki Women Awareness Society \(JWAS\)](#) is reviewing several of its past projects to assess their long-term sustainability and visible results almost after two decades after completion. The evaluation covers three areas of the Rural Community Infrastructure Works (RCIW), Small Community Water Management (SCWM) project implemented from 2005 to 2007, and this site represents one of them (*see annex 1*). [JWAS](#) is a women-led non-governmental organization in Nepal with a vision to create a prosperous society where women can live a dignified life.

The other two sites have also demonstrated similar patterns of impact in women's empowerment, climate change adaptation, and livelihood improvements.

The full detailed report of this evaluation is expected in mid of 2026, as the process has just begun.

When available, it can be downloaded from here: <https://jwas.org.np/reports/>

Women's Empowerment and Collective Action

One of the most visible long-term impacts of the RCIW intervention in this site is the empowerment of women through continued collective action. A female member recalled during the group discussion, *"The Dhaneshwar Community Forest started in 2001, marking World Environment Day; however, land conservation was not progressing well."*

Responding to her, the current president explained, *"That led 40 women to come together and work for conservation."* The National Soil Conservation Day on 9 August 2005 marked a crucial turning point in mobilizing women as leaders in local resource management, demonstrating that 'when women unite, they can achieve extraordinary change'.

These women not only initiated barren land plantation within community forest and water management, but also formalized their collective action through a community group named *Aishwarya Ban-Batika (Aishwarya Forest-Garden)*.

Participants repeatedly cited JWAS, and some of its staff members, not only for supporting their organization but also for empowering and motivating them at every step, continuously from 2005 through 2007.



Image 1: From left-the present president, a member, and the immediate past president (Photo: Nub Raj).

Since it was a women's group, leadership roles were consistently held by women, ensuring continuity and intergenerational participation (see image 1). An immediate past president

described, *"When one of the members died, who was also the group's founding president, we included her daughter-in-law in her position."*

Since then, they have followed this approach, which helped them maintain 40 active women members. According to the present president of the group, *"The process of transferring membership to the younger generations of the families has been one of the keys to our success."*

Such democratic and practical processes strengthened confidence of women members and sustained their engagement.

The group also follows formal institutional practices outlined in their guidelines to ensure transparency, accountability, and promote participation among all members.

They hold their comprehensive meeting, an informal General Assembly, annually on the 11th day of Asar according to the Nepali calendar (which falls on 25 or 26 June in the Gregorian calendar, depending on the leap year).

Now, the women members are making significant income from conservation activities (*see next sections*), which has also directly contributed to their empowerment. All the members echoed, *"The income we received, was spent on our children's education."*

When asked, *"Did not your family members demand that money from you?"* All of three them responded, *"They did initially. But later we collectively decided to invest in our children education, and also to fulfil our own needs."*

As a sister organization, the Forest-Garden must also comply with certain terms and conditions of the Dhaneshwar Community Forest, which include demonstrating transparent financial transactions and contributing a certain percentage of their income. The women's group did not express dissatisfaction with these provisions.

In relation with their investment to their children's education, the immediate past president happily shared,

"When my daughter started a job, she gave me her first month's salary, NPR 30,000 (USD 215), stating that 'it was you who invested in my education.' Personally, I was very happy when I heard that from my daughter, because I had worked so hard for it."*

** Approximate change, 1 USD equals to 140 NPR.*

This reflects both economic empowerment and an intergenerational shift in transferring generosity, care, and responsibilities.

The visible results were clearly demonstrating strong linkages to:

- SDG 5- Gender Equality (Target 5.5: Ensuring women's full participation in leadership and decision-making)
- SDG 16- Peace, Justice & Strong Institutions (Target 16.7: Promoting inclusive and participatory decision-making at all levels)

Climate Change Adaptation and Environmental Protection

Afforestation efforts of the group contributed to ecosystem services. As one member explained,

“We planted 260 mangos and Amriso (broom grass) plants. About eight years ago from now, when the broom grass disappeared, we replaced it with bamboo. Now mango trees and bamboo have grown, and this Forest-Garden covers almost all 60 hectares of Dhaneshowar Community Forest.”

This re-greening not only stabilized soils but also fulfilled the community's long-cherished aspiration (see image 2). The president added,

“We had always dreamt of seeing greenery above us. We used to wonder when our own area would be green. And from the last 20 years, it is here.”

The project also left lasting impacts in terms of climate change adaptation and environmental restoration. Down the Forest-Garden, there is a village with crowded houses and a dense population. Women members recalled that, before the interventions, floods caused severe downstream damage (they pointed in different directions as they spoke),

“The water that flowed from here downstream used to cause huge damage during monsoon. Now that land has been protected with these mango trees, bamboos, and the pond.”



Image 2: A fish pond created by conserving downstream flowing water (Photo: Nub Raj).

The construction of a pond, which collects water that flows downstream, and the plantations reduced flood risks and created habitats for biodiversity. They said,

“Now birds have water to drink, they have shelter, and wild animals also have preserved habitat. Many wild animals have begun coming to this greenery area after it was protected.”

The visible greenery and the testimonies of women clearly demonstrate the project's contribution:

- SDG 13- Climate Action (Target 13.1: Strengthening resilience to climate-related hazards).
- SDG 15- Life on Land (Target 15.1: Ensuring conservation and sustainable use of terrestrial ecosystems).

Livelihoods and Economic Wellbeing

The economic transformation of the Forest-Garden is among the most striking impacts. Although the participants did not have formal records in their hand during the discussion, they shared extensive information. They said that in the beginning their income was modest. From the mango and broom-grass, each member initially earned roughly NPR 2,800 (USD 20), 8,000 (USD 57), and 20,000 (USD 143) annually.



Image 3: Land covered with mango trees with turmeric plants growing underneath (Photo: Nub Raj).

Overtime, the income gradually increased, and now it is comparatively good (amount withheld). The income is primarily from selling mangoes, bamboo, fish from a conserved pond, and other crops growing underneath of mango trees such as turmeric (see image 3).

This income was not only shared among members but also reinvested in household wellbeing. One participant proudly shared the amount each of the 40 members currently receive (amount withheld here). In addition, the pond provides irrigation, enabling year-round farming of the land downstream. They happily echoed,

“Because of irrigation, now we harvest three crops annually. The pond stores water, preventing flooding. Until January to March, we get irrigation water. Additionally, we are also selling fish and making money.”

Even after some challenges, such as the decay of broom grass eight years ago, they adapted a mitigation strategy including bamboo planting. Yet, they said, challenges remain regarding market linkages, *“To sell bamboo, we need bigger traders, which is a challenge.”*

However, the group was confident, stating, *“Now we are united, we can achieve anything.”*

The impacts have direct linkages to,

- SDG 1- No Poverty (Target 1.5: Building resilience of the poor and reducing exposure to shocks)
- SDG 2- Zero Hunger (Target 2.3: Doubling agricultural productivity and incomes of small-scale producers)
- SDG 8- Decent Work and Economic Growth (Target 8.5: Achieving full and productive employment and equal pay).

Conclusion

This JWAS-led RCIW-SCWM project demonstrates how community-based natural resource management can leave long-term impacts beyond the project period. It also highlights the contributions of a dedicated non-governmental organization, JWAS, in promoting women's empowerment, climate change adaptation, and sustainable livelihoods. Project impacts in these areas still remain visible and consolidated nearly two decades after project completion.

Similar patterns of sustainable results have been seen across the other two project sites under study, showing the consistency and sustainability of outcomes. These impacts align directly with global commitments under the SDGs, demonstrating how local initiatives contribute to global sustainable development.

Additional Location Information

For anyone, interested in visiting this site, it is located close to the East-West Highway, approximately three kilometers from Bardibas, Mahottari, Nepal, right behind the Leprosy Hospital in Lalghadh.

Annex 1: An appreciation letter provided to JWAS By Government



Date : 2nd, sept, 2008

Subject : - To Whom It May Concern

It is informed that **Janaki Women Awareness Society (JWAS)** has worked with the collaboration with this organization (DSCO-Dhanusha) for **Rural Community Infrastructure Works Program (RCIW) & Soil Conservation and Watershed Management Project (SCWM)** in Dhanusha district from April 2005 to Nov 2007. During the participation of JWAS for the social mobilization activities of SCWM Program in RCIW, JWAS has implemented different activities on the watersheds of Dhanusha. Some of the major activities performed by JWAS in Dhanusha are as given in the table below. This organization always find JWAS as a competent social organization for implementation of the Natural resources activities like; soil conservation, community infrastructure development, income generation, Participatory Learning Center (PLC), Saving Credit, Cooperative promotion, plantation of the community, land productivity conservation and other necessary needed of the community.

SN	Name of Watershed	Activities performed by JWAS
01)	Ratu River	- Support for constructing Bio- engineering River Bank (Dam) - Income generating activities related to conservation of degraded land - Plantation activities - User group formation & Mobilization for Conservation activities
02)	Badhahari River	- Support for constructing Bio- engineering River Bank (Dam) - Income generating activities related to conservation of damaged land - Conservation Plantation activities
03)	Aurahi River	- Support for constructing Bio- engineering River Bank (Dam) - Conservation / Catchments ponds - Income generation activities on the regretted land of river reclaimed areas - Conservation Plantation activities/ works
04)	Jallad River	- Support for constructing Bio- engineering River Bank (Dam) - Income generating activities related to conservation of degraded land - Conservation Plantation activities - User group formation & Mobilization for Conservation activities

We always wish for the social impact of JWAS in the future.

Yours truly,

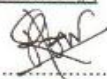

(Rajendra Prasad Yadav)
District Soil Conservation Officer

Image 4: An appreciation and recognition letter provided by an authorized agency to JWAS

The impact evaluation is being conducted for the projects listed under Serial Numbers 01 and 03 in this letter (see image 4). This particular case of impact is based on the project implemented under Serial Number 01.

¹ The evaluation team includes Nub Raj Bhandari, Sushil Dhakal, Santosh Karn, and Majoj Thakur.