



Climate Resilience in the Kamala River Basin 2024-2026

Dhanusha District/Siraha District, Madhesh Province, south Nepal

1. Introduction

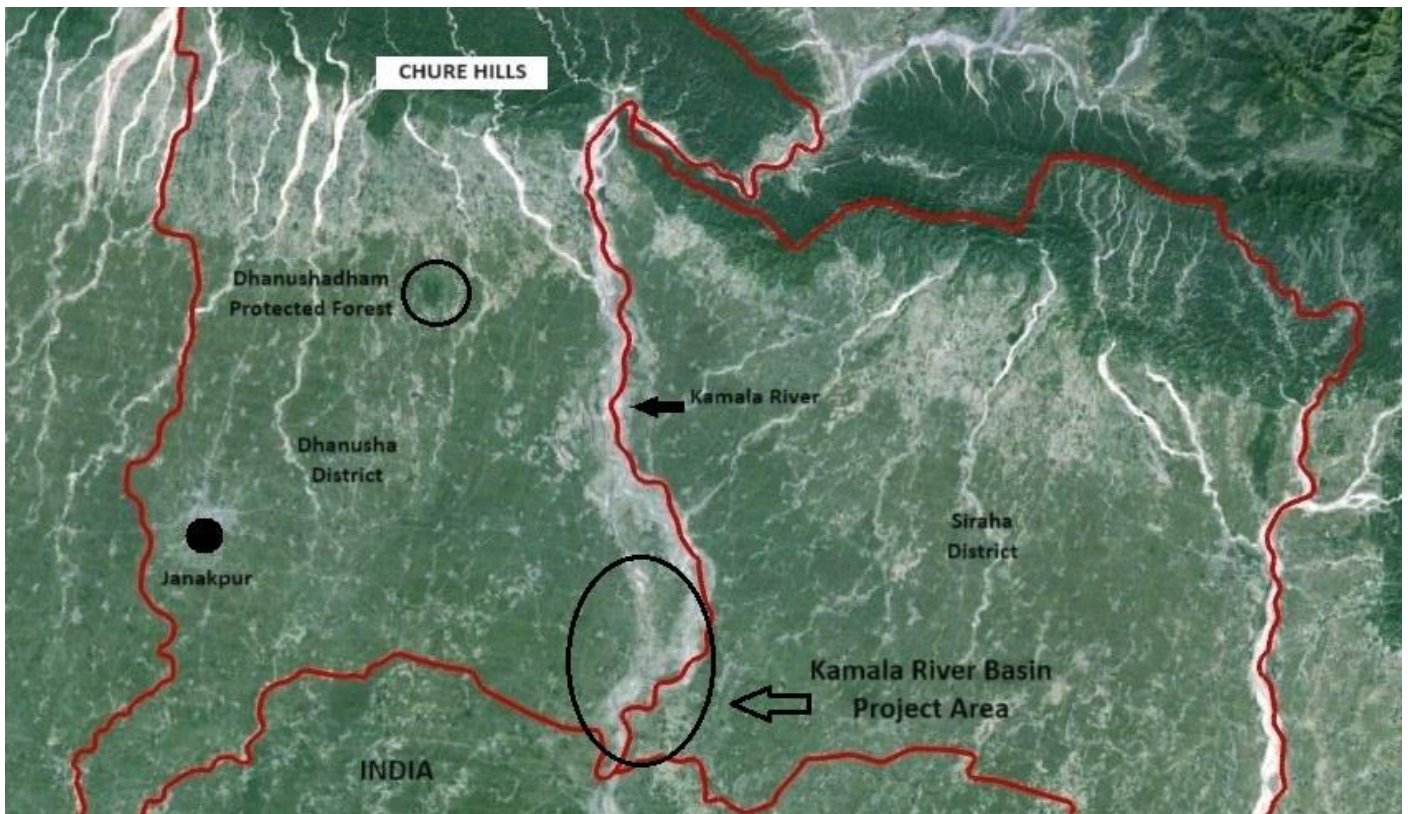
Nepal is the tenth most impacted country in the world by climate crisis and Pipal Tree is preparing to help its poorest communities withstand inevitable disasters and become more resilient. With every negative there is a positive and we know that by adapting quickly and implementing pioneering educational, environmental and livelihoods projects we can make those communities stronger, healthier and more prosperous than before.

One such project is the two-year Kamala River Basin project that will launch on 1st August 2024. It is primarily an education project for children from low-caste (untouchable) families living in the Kamala River Basin area that has been the scene of devastating climate change-related floods. Many of the families have been displaced by that flooding to live a hand-to-mouth existence in areas where they are not made welcome by host communities. The project has major environmental elements in the form of rapid-reforestation to create four forests as natural flood barriers that will mitigate against the risk of further loss of lives and livelihoods in future disasters.

The project will be implemented by our project partner NGO, the Mithila Wildlife Trust (MWT), with inputs from our social enterprise partner, Lily's Leaves. MWT will in turn coordinate with government bodies, municipal authorities, schools and community leaders to ensure best use of resources and a sustainable outcome.

The project will be funded primarily through Pipal Tree 'Big Give' appeals in July 2024 and July 2025, a means of developing co-funding for projects through matching pledges. The project budget is £285,000 over two years, £150,000 in year one and £135,000 in year two.

2. The region and its challenges

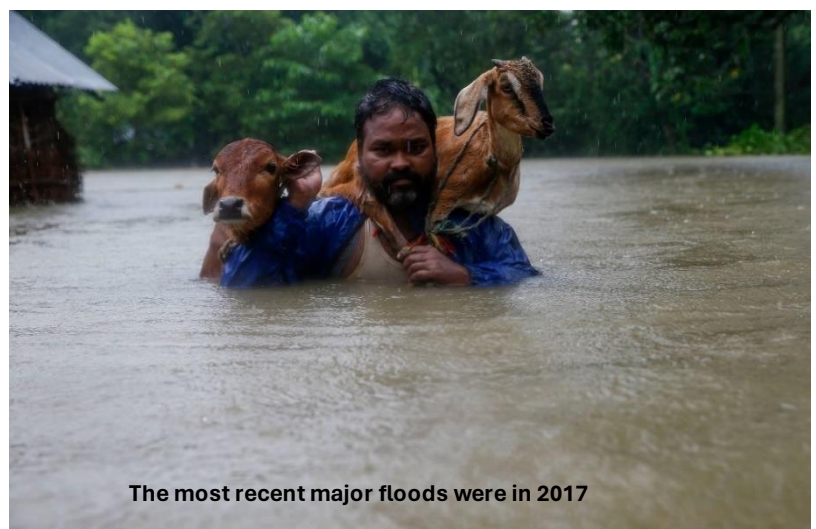


The Kamala River demarcates the border between Dhanusha and Siraha Districts, the former being our main operational area. It is 328km long, 208km of which are in Nepal and the remainder in Bihar, north India. It is a river of stunning natural beauty, of economic, cultural and religious significance for Hindus. The form of the leading Hindu goddess, Laxmi, sitting on a lotus (“Kamal” in Nepali and Hindi) is known as “Kamala”, hence the name. Locally, the river is worshipped as a deity, the sister of Ganga, the goddess of water. Pilgrims travel from afar to bathe in the river as an act of worship.

The communities along the Kamala River have to contend with some degree of floods annually. These were extreme in 1978, 1987, 2004, 2007 and 2017. The 2004 flood was the worst of these, claiming 800 lives and destroying several villages. People lost their land and had to be relocated to nearby government-owned land thereafter living a hand-to-mouth existence. There are other threats in the form of silt deposition that has ruined farmland and the climate change effect of reduction in flow. Paradoxically, it is conceivable that, because of climate change, within the next two decades a river that once flowed for 365 days per year will have dried up altogether. The consequences for nature



The sweeping expanse of the Kamala River

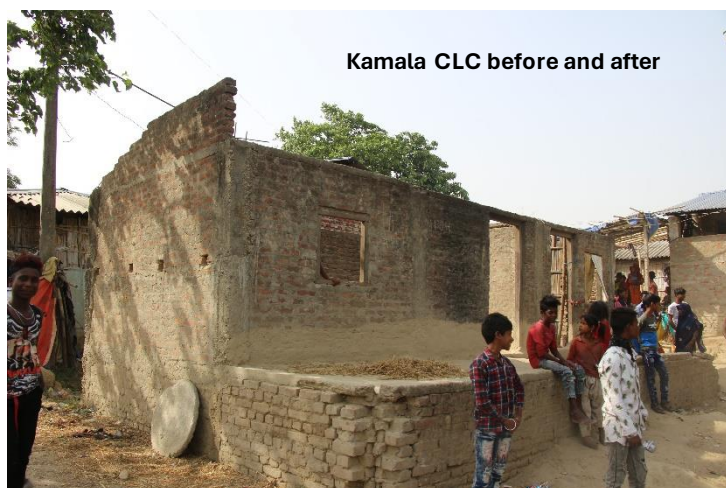


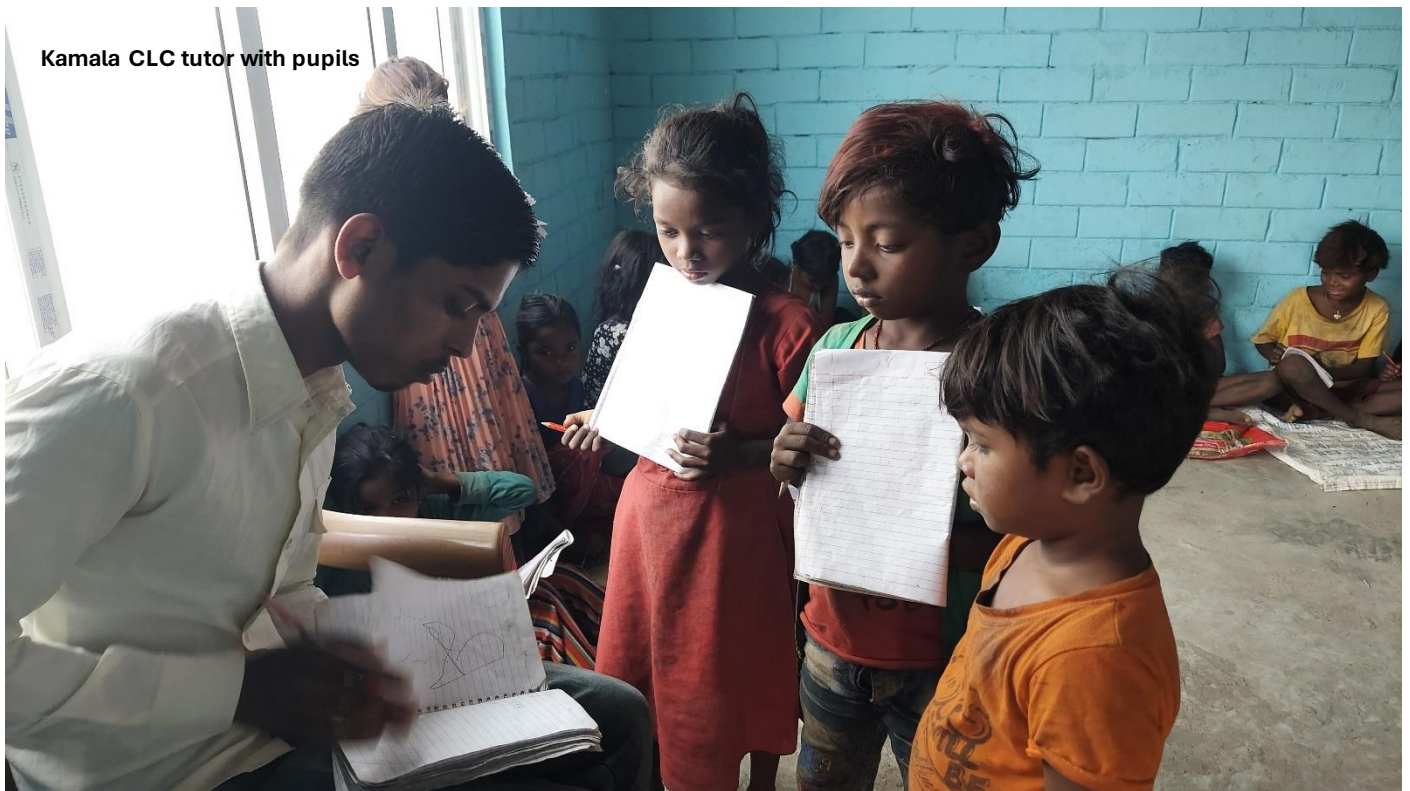
The most recent major floods were in 2017

and agriculture are self-evident. Communities therefore need to become resilient to dealing with both extremes – floods and drought.

Our joint life-saving emergency food relief with MWT began in 2020 when we delivered supplies to 29,000 people. During a second lockdown in 2021 we helped 14,000 people. It was during these relief efforts that the plight of the Kamala River basin communities came to our attention. Children were not attending school, but, seeing them walking around naked, this was scarcely surprising. Besides the issue of grinding poverty, it was clear that there were other deeply ingrained issues such as the lack of community cohesion. Following the floods of 2004, many families had to be relocated to live on government-owned land on higher ground further inland from the riverbanks. Not only did these displaced people feel insecure in their new homes, but they were made very unwelcome by host communities who saw them as interlopers. Divided communities cannot stand, least of all against the burgeoning impact of climate change.

We followed this food relief work by constructing two Community Learning Centres (CLC's) in the Kamala River basin area at Kamala village and at Pasmán Tol. MWT introduced the CLC model in 2013 as an entry point to mainstream education for children from low-caste families and to help those who are registered at mainstream schools to maintain their attendance. This has been by the CLC tutors helping children with non-formal education and with their homework – something that illiterate parents cannot do. These tutors are college students from the same low-caste groups and the modest tutor salaries they receive allows them to complete their own education and potentially enter higher education and/or professions.





After completing these building projects, we planted two rapid-growth forest strips along the bank of the Kamala River that would offer some future flood protection to the villages. These have been planted using the 'Miyawaki Method' that we have been pioneering in Nepal since December 2021. Using this Method, forests grow ten times faster, are twenty times more biodiverse and thirty times denser than those planted conventionally. We have proven this to be the case at a demonstration site at Dhanushadham where trees planted in 2021 using the Miyawaki Method already tower over a strip of trees planted conventionally as a control.

Now we are in a position to upscale, building upon this experience as we extend our reach within the broader community. The specific need within the Kamala River basin communities that we are focussing upon can be summarised as follows:

- Up to 600 low-caste children (including from families displaced by climate change-related floods) are not attending three community schools.
- These children's parents are often illiterate and unable to support them with homework leading to poor attendance and a high dropout rate.
- Because these schools (which have 2,100 registered pupils) are considered inadequate, boys attend irregularly while girls are kept at home to do housework.
- Families displaced by floods are shunned by host communities. There is a need for integration to build resilience in the face of future climate change related impacts.
- The villages remain vulnerable to future floods that can be just as devastating as before.

3. Project outline

In outline, we will adopt a holistic approach involving:

- Upgrading of the learning environment at three community schools to make these fit for purpose and more attractive for staff and students alike. The upgrade will involve minor capital works such as refurbishment and installation of water/sanitation facilities. The works will be conducted during the school holiday months of January 2025 and January 2026.
- Construction and operation of three CLC's that can provide essential homework support to low-caste children. These will be based upon previous design models involving the use of eco-bricks (cold compressed cement and sand/earth) and building design features such as raised roofs to allow air circulation that keeps classrooms cooler.

- Material support to up to 2,500 low-caste (untouchable) children - and especially to girls - to incentivise school attendance and reduce dropout rates. We will distribute 'free' school rucksacks and, where appropriate, reusable sanitary pads to all children attending the schools and CLC's. These items will be made by young deaf women at the Lily's Leaves social enterprise in Kathmandu, ensuring a social win-win for both the women and the child recipients.
- Investment in a locally held high interest bank account that can cover the nine CLC tutor salaries for the foreseeable future from interest proceeds.
- Building community cohesion and resilience in the face of climate change through having representatives from this divided community on CLC management committees.
- Reinforcing flood protection by planting four strategically sited Miyawaki forests as future natural flood barriers. This will benefit approximately 20,000 villagers.

The full plan is presented as a logical framework ('logframe') that is attached to this document.

4. Our partnerships

Mithila Wildlife Trust (MWT)

MWT was founded in 2013 by Dev Narayan Mandal, a native of Dhanusha District, after he returned from several years of employment with SOS Animal Rescue in Delhi. He was determined to restore the forests and wildlife that he had known in his childhood, re-establishing the biodiversity that had been lost through intensive agriculture. His philosophy is that conservation and restoration of the environment to be successful it must go hand-in-hand with community upliftment, including through educational projects. If people feel that their basic needs are being addressed, they will be responsive to environmental messages. This has indeed proven to be the case.



In preparation for this project, MWT has consulted with local government, Kamala Municipality and Janak Nandini village Municipality to obtain baseline information on the project need and confirm the availability of land for construction of CLC's and for the planting of Miyawaki forests. This liaison has been very positive, with the authorities ready to provide the necessary letters of support for implementation of the proposed project activities. They have donated land as a gift-in-kind (valued at £20,000) for CLC building and allocated non-registered land (since it is a former riverbed) that can be used for plantation work, free of charge.

MWT has also consulted with community leaders to establish their interest and willingness to collaborate in sustainability. This has included with leading activists of The Kamala River Watershed Campaign, a CBO comprising approximately 10,000 volunteers that works towards the upliftment of the 610,000 people who live in the whole Kamala River Basin area. Their ready support has been secured, including an undertaking to maintain the facilities and plantations in the future, while supporting the CLC's and schools through parent committees. MWT has liaised with all three community schools to obtain baseline data and their project inputs. Once again, this has led to an enthusiastic response.

Finally, MWT has organised five community interactions with villagers during January to April 2024 to discuss plans and obtain their inputs. During the interactions, MWT interviewed a sample group of five children from each of five villages to establish why their attendance was irregular. Most children commented that they learnt very little at the community schools or the lessons were beyond them, so they did not keep up attendance. In the villages the team found that no girls were attending school because parents would not allow them to attend, given that their brothers were learning nothing. Instead, the girls remained at home to carry out domestic chores. However, parents confirmed that they would encourage girls to attend local CLC's if these were established.

Lily's Leaves

Pipal Tree has been working with social enterprise Lily's Leaves since helping to establish it in October 2020. Lily's Leaves exists for the benefit of vulnerable women including a small group of deaf women who have been in training/employment at the Lily's Leaves production centre in Kathmandu. Their work has included the manufacture of school rucksacks and reusable sanitary pads (dignity pads). These have already been distributed in large consignments to community schools elsewhere in Madhesh Province.

5. Budget and fundraising

The budget for year one is £150,000 and for year two £135,000. The outline budget is attached to this document.

Fundraising is centred on two special Big Give matching donation public appeals that will run in July 2024 and July 2025. The appeals involve collecting matching pledges beforehand (totalling £75,000 and £67,500 respectively) before opening the appeals to the public on the basis of all donations made online doubling in value through the matching pledges. Donations may be made by individuals, by corporates or foundations and in any major currency (further information available upon request to Philip). The Big Give campaign page is [here](#) – a donate button will appear on the page when the appeal goes live.

6. Timeline

The timeline is as follows:

- 9-16 July 2024 Big Give education appeal, fundraising target £150,000
- 1st-7th August 2024 Baseline survey
- 1 August 2024 - construction begins on two CLC's. Work completed within 3 months
- 1 August 2024 - preparation of landsites begins for planting of two strategic Miyawaki rapid-growth forests. Plantation completed within one month (depends upon weather)
- 1 August 2024 - six new tutors (college students) identified and 3-day residential induction training completed. Following completion of training, tutors join existing CLC's for teaching experience. They can join their new CLC's once construction has been completed
- Jan 2025 (school holiday month) - refurbishments and repairs at three mainstream schools
- 8-15 July 2025 Big Give education appeal, fundraising target £135,000
- 22-31 July 2025 - Mid-term evaluation
- 1 August 2025 - construction begins on third CLC. Completed within three months
- 1 August 2025 - preparation of third and fourth landsites for Miyawaki plantation. Plantation completed within one month
- Jan 2026 - refurbishment and repairs at three mainstream schools. Surplus funds used for classroom furniture/teaching aids
- Late Jun 2026 - final evaluation begins for reporting in July 2026
- Mid-July 2026 - a third Big Give education appeal that can raise funds towards a gentle transition to sustainability and/or to address any funding shortfall in the previous appeals.

Note that flexibility around these dates is required according to the risk factors below.

7. Risk analysis

The main risks are:

- Failure to reach the fundraising targets in our two Big Give education appeals. If this happens we will raise any funding shortfall through a July 2026 Big Give appeal. Alternatively, we may redirect relevant funds raised at our other annual Big Give appeals (Environment in April, Women/Girls in October and the Christmas Appeal) towards appropriate elements of this project.

- Weather conditions - and especially high temperatures - can make building work challenging. We will employ a contractor who is prepared to undertake early morning work (pre 9 a.m.) if need be to avoid the noonday heat.
- Likewise, high temperatures and lack of rainfall can restrict our capacity to plant saplings. We mitigate for this by being flexible in timings for planting around climate conditions.
- There is always the risk of national disruption from natural disasters such as earthquake, floods, COVID etc. We have set up a special fund (currently worth £20,000) to provide emergency relief if the need arises, but clearly a major disaster can still affect the project timings. We will add £10,000 to this important fund per year over the project period.

8. Lasting impacts and sustainability

There will be three main lasting impacts:

- Community relationships - The project will foster strong relationships within the community between the original inhabitants and displaced people and between our implementing partner NGO and community leaders. This will foster greater resilience and collaboration.
- Education - We are extending an existing CLC/school model to the Kamala River basin area that can be sustained by the bursary fund that we are building through a high-interest bank account that can cover the costs of tutors. As well as providing the tuition support that can help children remain in school, these tutors act as role models for the children they teach, demonstrating that education can lead to opportunities. The tutor salaries support tutors through college to obtain higher education qualifications that allow them to enter professions, including becoming teachers at mainstream schools. This has a huge impact on the communities through low caste people - and women who have traditionally faced gender discrimination - becoming community leaders.
- Environment - The rapid-growth forests that we will plant will act as natural flood barriers, increase biodiversity and provide alternative livelihoods through sustainable use of forest products and from ecotourism. Our increased disaster relief funds could save lives during future environmental disasters

9. Monitoring and evaluation

The central coordinator will be Lt Col (Retd) Philip Holmes OBE, Founder/CEO of Pipal Tree, working in close conjunction with the Pipal Tree Trustee/Treasurer, Mr John Clark FCA and with Mr Dev Narayan Mandal, Executive Chairman of MWT. The project will be monitored in accordance with an MOU and against the logframe by regular reporting and through project visits (at least two annually, probably three in 2025/2026). At least one Trustee will visit annually. A 2025 visit will be timed to the mid-project evaluation and a 2026 visit to the end of the project.

The project will be registered with the Social Welfare Council of Nepal, the governmental body that monitors and evaluates the performance of NGOs and social enterprises. It is the official external evaluator. It will base its evaluation upon inputs from all the key stakeholders.

10. Conclusion

Since 2020 we have been collaborating with Dev Narayan Mandal and Lily Katuwal, the Founders of MWT and Lily's Leaves (who are natural entrepreneurs), pioneering original approaches to challenges old and new. We have delivered dramatic demonstrable benefits to vulnerable people and to the environment. We now need to find funds that are sufficient in scale to roll these solutions out and make a transformative impact appropriate to the massive threat to life and livelihoods. Our traditional approach of applying to grant-making foundations for modest grants is no longer enough to deliver the investment that we need. We are therefore inviting major gifts and grants that we can double in value through co-funding arrangements in the Big Give, a methodology where we have demonstrated expertise and consistent success.

Please contact me to discuss how we might collaborate for the good of some of Nepal's most vulnerable people and their children, as we help them move through the climate crisis challenges to emerge stronger than before.

Philip Holmes

Lt Col (Retd) Philip Holmes OBE
Founder/CEO Pipal Tree
22nd May 2024

A copycat at the Kamala CLC

