CHAPTER 14

Dug-Well Revival
An Ethnographic Project for Drinking Water in North Bihar, India

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Project Background

In the chronically flooded areas of North Bihar, India, a network of development organizations working on safe drinking water in a flood-affected region found themselves in a conundrum. Dug-well water, which is often contaminated bacteriologically, seemed far easier to clean than handpump water, which is often polluted with heavy metals. Yet the history of the dug-well is characterized by caste-based discrimination, and community members seemed to have definitively turned for their drinking water to the handpump, perceived as clean and modern. Ethnographic research, however, revealed residual value for the dug-well on several grounds—in addition to those that are religious and caste-based—as well as a variety of problems for the handpump. On the basis of these ethnographic data, a network of organizations called Megh Pyne Abhiyan (MPA)—literally “the clouds’ water campaign”—decided to start working on dug-well revival, but they would do so only by stimulating conversations on the matter. Encouraged by positive responses, MPA started participating more actively in the revival process in order to ensure that dug-wells remain collective and open-access and to eschew the caste-based manipulation of drinking water.

MPA’s five organizations, all of Gandhian inspiration, had been working separately on issues of development and poverty in their respective areas (the districts of Supaul, Saharsa, Khagaria, Madhubani, and West Champaran). Their leaders, however, all men in their early sixties, shared a common personal connection with the independence leader and political theorist Jayaprakash Narayan, who led a “total revolution” against Indira Gandhi in the mid-1970s. In accordance with such a history, and realizing the current difficulties related
to drinking water in the area, MPA leaders chose to organize in the form of a campaign, which meant involving local people in conversations about the issue and possible coping mechanisms rather than following the typical development transfer of funds and technology.

During floods, as well as in their aftermath, finding clean drinking water is as challenging as it is vital for survival. The inhabitants of North Bihar access drinking water mostly from handpumps, although there are still dug-wells, which used to be the more common source of drinking water.

The dug-well in rural North Bihar is a man-made, brick-lined cavity in the ground that gives access to shallow groundwater. It is a communal technology, owned by several families together, unlike the single-owned handpump. A dug-well has to be cleaned of debris occasionally, and it takes several men to perform the maintenance together. The reason for the collective ownership of the dug-well, I was told, is precisely located in the practice of sharing the labor required to dig and maintain it, apart from the convenience of splitting the cost of the initial investment. Both digging and cleaning require shared labor and shared knowledge, the latter transmitted from one generation to the next.

Traditionally, dug-wells were owned collectively by members of a single caste, and the sharing of the water with members of other castes was restricted by rules of commensality. This practice translated not only into the inability to share water even when unevenly distributed but also into a climate of deep humiliation and violent discrimination connected to water and the technology of water access.¹

The more modern handpump, on the other hand, is a hand-operated system of suction and pipes inserted in the ground, a materiality aligned with the practice of individual ownership and usage. I found a high number of handpumps to be nonfunctional, however, a fact that locals most often explained as due to overuse. These frequent malfunctions are, I was told, the materiality that explains the individual ownership of the handpump. The other reasoning for the handpump to be owned by a single family is that, compared with the open dug-well, the handpump hides the extracted water from sight: the lack of visibility of the resource’s quantity and quality means that accountability is unfeasible, as are collective adjustments in terms of demand. Nor is cooperation required for cleaning; although the handpump manuals prescribe regular cleaning, it is common practice to not do so.

Individual ownership does not ensure independence, however, although independence was also mentioned by some residents as the justification for preferring the handpump to the dug-well. Knowledge about the setup, function, and repair of the handpump, as well as the necessary maintenance instruments, are still mostly owned by technicians belonging to commercial entities (Cortesi, forthcoming). As a result, people rely on the handpump shop in the next big town instead of on each other.
The fact that handpump owners do not believe the handpumps need routine cleaning does not necessarily mean that they believe that the handpumps provide clean water. While handpump water is often cooler than ambient temperature, and thus feels refreshing to drink, it is often also foul smelling, and an opaque film settles on the surface of water that is left out overnight. In addition, handpump water stains buckets and the pump platform a rusty orange color. When used to wash white clothes, it often taints them a yellowish hue. It changes the taste of food that is cooked in it, in particular food cooked without spices, such as boiled rice. It is commonly said that certain animals, such as cattle, do not like to drink handpump water (Cortesi, forthcoming).

It was perhaps for these reasons that the handpump, introduced in the late 1970s by the Bihar government under UNICEF’s advice, was at first refused by the rural population, although the official narrative attributes the refusal to a component of the pump mechanism that was, initially, made of leather, and hence rejected by upper-caste Hindus. The head of UNICEF India at the time, Rupert Talbot, the self-proclaimed man behind the introduction of handpumps, recalls in his memoirs that the handpump remained underutilized until the 1990s, when, mysteriously, the technology became increasingly accepted (Talbot and Black 2005). In today’s North Bihar, residents have definitively turned to the handpump and thus turned their backs on the dug-well.

**Program Description**

In 2007 and 2008, I worked as state coordinator and applied anthropologist with MPA. As I experienced myself, North Bihar, the alluvial floodplain of the rivers that descend from the Himalayan range, is often a sea on land. A few months into my new job, when I had barely met all of my new colleagues, we were inundated by devastating floods that affected twenty-five million persons. The next year, one of the main rivers in the area completely changed its course and started running on a previous riverbed that had been dry for over a century, which had since become home to three million persons. While floods are nothing new in a river-dense landscape, the recent history of inundations in most of North Bihar shows that they are increasingly severe, frequent, and disastrous.

After the first few months of disaster management, I started redesigning my job in order to cater to the specifics of the organization and the contextual challenges. My previous year-long experience in ethnographic research in South India gave me the confidence to conduct new ethnographic research, through which, in line with my training in development studies and anthropology of development, I devised my inquiry to inform development interventions.

I also designed an extensive and comprehensive water quality testing exercise. After receiving opportune training by the Development Alternatives
Group, a New Delhi–based NGO, my colleagues and I tested fifty of the most-used water sources in each of the twenty-two panchayat (one of the smallest administrative units in the area). These were mostly centrally located handpumps, but there were also a few dug-wells that still had water. With color-coded reagents developed by the same organization that trained us, we tested for several parameters, including bacteriological contamination, iron, arsenic, fluoride, and residual chlorine. Each test result was associated with a synthetic sociological profile of the technology and the community accessing it.

Although our testing was eventually interrupted by a second major flood, we tested long enough to get remarkable results. We found several contaminants above permissible limits: in the handpumps, we found very high quantities of iron and arsenic, even in areas that were not officially declared as arsenic affected. In certain pockets we also found considerable amounts of fluoride. In dug-wells, we found biological contamination—detected through E. coli—rather than chemical contamination.

Our results were consistent with information obtained locally, as well as with the sensorial evidence of the water. Locals were very aware of the effects of the handpump on human health and its visible traces in the water, despite not identifying the contamination with iron at the time. In the dug-well, however, where water is visible—visibly available or scarce, visibly clean or dirty—people perceived the water as dirty and justified their perceptions with the fact that the well had not been cleaned.

Based on these results, we realized relatively quickly that MPA was facing the conundrum mentioned initially. While the campaign had focused on rainwater harvesting, we understood that rainwater—an excellent source of clean water locally, but the safe harvesting and storage of which requires some attention and resources—could not be the sole source of drinking water for the entire year. Despite its quality, groundwater is considered the primary source of drinking water. It is accessible, available, cooler than surface water, and socially advantageous, and we realized that not all rural residents possessing a hand-pump were likely to shift their consumption from groundwater to rainwater—thus the need to find an additional source of water.

We also realized that the dug-well, an open source that villagers had been cleaning regularly for generations, was, in this specific context of polluted groundwater, a more reliable source of clean drinking water than the hand-pump. Yet we had no intention, through the promotion of the dug-well, to offer opportunities of recrudescence to castism or to risk such a possibility. Adding to the intractability of the problem, the dug-well did not seem to have much credence among the generation of current family heads or the younger generation, who had chosen individual independence over collective management, regardless of the consequences.
Ethnographic research revealed, however, that those with gastric ailments who had begun drinking rainwater on a regular basis had started feeling some improvement, and they had thus begun to correlate some of their health concerns with handpump-sourced drinking water. This observation was aligned with the impressions of seasonal migrants, who found it difficult to return to the area due to the rusty taste of its handpump water. Others had started discussing the historical adoption of the handpump over the dug-well and their underlying political and commercial implications. The handpump, I found, was as riddled with power issues as the dug-well (Cortesi, forthcoming).

On the other hand, the dug-well continued to yield positive meanings of both self-help and community building. Even if dug-wells were a tradition from a religious perspective—several Hindu temples use dug-wells to secure water for rituals—the dug-well had emerged culturally as having residual value regardless of religious practices. Its utility was widely recognized, for example, in managing a disruptive fire emergency, which is a classic village-level disaster, given that the primary composition of housing material is organic fibers. During a fire, handpumps are unable to yield sufficient water and often break down under exertion, while dug-wells give people a chance to save their village.

Suresh Choudhary, a man in his fifties, was proudly maintaining the dug-well built by his great-great-grandfather and accessing water from it, although not for drinking purposes. Although he cleaned the dug-well regularly, he claimed not to know how to keep the water of drinkable quality, even though his father, who was around, seemed confident about its safety. Among the reasons to keep the dug-well clean, the family mentioned that (1) their rice remained white after cooking while others’ rice turned yellow, (2) their lentils tasted better than anyone else’s in the village, (3) their clothes remained white after washing them, while others were easily discolored, and (4) their cattle preferred to drink water sourced from the dug-well rather than that from the handpump. All the advantages of the dug-well over the handpump that were mentioned by this family are compatible with the effects of utilizing iron-free water instead of iron-contaminated water. These remarks also highlight a discourse of purity (purity of food and clothes are both of high symbolic value) that values dug-well water over handpump water (Cortesi 2022).

At MPA, we decided to explore the possibility of reviving dug-wells. How to do this was discussed intensely. In line with MPA’s identity as a campaign and following the ethnographic research exercise that the partners experienced while accompanying me, we chose to eschew the typical NGO modality as a solution provider and instead set out to engage individuals in conversations about dug-wells and to encourage the transmission of local knowledge about how to clean them. This involved stimulating conversations about unutilized dug-wells in areas where water quality tests indicated their comparative benefits.
Figure 14.1. Suresh Choudhary’s father, with his well in Bihar, India. © Luisa Cortesi.
This choice was difficult because the funding agency paying for the field-workers’ salaries expected a one-size-fits-all solution that could be exported to other areas in India. Refusing to do as the agency expected was not easy, but after opportune discussion we all agreed that valuing local specificities was a safer, more respectful, and more progressive approach. Local knowledge, while never homogenous or endogenous (Agrawal 1995), was struggling amid multiple conflicting interventions by political and commercial entities (as discussed in Cortesi 2014). Further, a dug-well is not only a matter of water, but also a matter of soil. In the end, since dug-well revival entails the risky procedure of going down into a large and open hole in the ground, it seemed safer and more reasonable to trust locals in handling their water and soil (I have argued that these are “two faces of the same coin” in Cortesi 2021). The funding agency was flexible enough to continue to support our efforts, albeit modestly.

Implementation and the Anthropologist’s Role

The floods of 2007 went mostly underreported because Bihar, just resurfacing from a period of political turmoil, was still considered too dangerous by international and even national development organizations. Media personnel refused to visit North Bihar, as infamous for its many kidnappings and lawlessness as it is for its floods (for example, see Ahmed 2007 on children kidnapped in the thousands in Bihar).

I faced the inundations mostly alone and with underdeveloped local language skills. I was caught in floodwater several times: stuck in the heavy rains that inundated all the roads and terrain around my forest shack in Saharsa; caught off guard by a surge of floodwater that obliterated the previously safe-looking road I was traveling on in Motihari; stranded in a flooded town in West Champaran; caught in a quick and dirty flash flood between Madhubani and Dharbanga; and trapped by a suddenly engorged river I was about to cross on foot in the north of Supaul. Walking through flooded areas to visit affected villages and self-made relief camps—sometimes among floating dead bodies and facing physical harm but also making uncomfortable decisions about relief operations and long-term planning—was demanding, but this experience was a watershed moment for me both personally and professionally.

When I joined MPA, I was not exactly welcomed by the NGO’s leaders. While I was initially worried that my presence would echo colonial governance, perhaps of the interiorized type, I soon learned that my interlocutors did not identify or behave as victims. They had historical interpretations and antagonisms that were very different from what I had imagined. But they still had very good reasons to prefer not having me around: Why on earth would the heads of these five long-standing NGOs, all seasoned political and social lead-
ers, accept a young, foreign woman who could barely take care of herself in that context? Why entrust her with coordinating all the teams, making programmatic decisions, and controlling members’ finances? The fact that the network founder sought gender equity and wanted an outsider with no affiliations to leverage was, reasonably, not in their best interest. From the second visit, each team put me through tests of different kinds—patience, determination, but mostly physical endurance—devised to either give me the opportunity to prove myself or, even better, to exit and go back to where I came from.

But it was during the floods, my “baptism of water,” that my relationship with the organizations and the team changed radically. Perhaps the awareness of what it means to live in rural Bihar during destructive floods changed my attitude toward my own colleagues. In part, they saw the amazement in the eyes of villagers at seeing a foreign young woman go through the floods with them, surprised that I had not simply taken the next flight home. It may also have been the way I handled the network and its involvement in relief operations that eventually proved my dedication to MPA and my alignment with their practical ideology.

Being accepted and trusted by fieldworkers and team leaders was essential to accomplishing the tasks my job entailed. Not only did I have to lead—and then co-lead, when the network founder returned from travels abroad—a complex network of NGOs through devastating floods a few months into my jobs, but I was also proposing to challenge long-term development frames. My plan was to rethink the typical cycle of social development intervention by introducing concomitant ethnographic research in the practice of development.

This was not the “design-intervention-evaluation” phased paradigm or the classic Participatory Rural Appraisal or Research Action (Chambers 1994), the limitations of which I had both studied in the literature and experienced firsthand in Tamil Nadu, but a form of research-cum-project that was based in a dialectic relation of mutual learning. Choosing to engage local stakeholders in extensive conversations about dug-wells and encourage knowledge transmission on how to clean them meant choosing the slow route, with less-than-immediate success stories and photographic evidence and without the relations of patronage that commonly involve both funding agencies and local NGOs at interconnected scales. Toward this goal, I reformed and trained the five teams of local residents for a total of fifty-two fieldworkers, men and women in equal parts.

After a few rounds of meetings in several villages, we were invited to visit a newly cleaned dug-well. The owner of the well, Ranvir Prasad, an eighty-eight-year-old man, welcomed us with all honors. While everyone’s eyes were on the well’s water, I noticed a sparkle in the old man’s eyes. He was extremely proud of his century-old dug-well, not simply because he could source clean water from it, which he always knew was better in quality than the foul-smelling...
water sourced by his handpump, but because he descended himself inside the
dug-well with his seventeen-year-old great-grandson.

When I heard the story of the old man in the dug-well, I was terrified—at
least until I understood that being the source of information for his great-
grandson, being able to teach him something worthwhile, and, on top of that,
being listened to by him was, for this man at this point of his life, worth the risk.
That meeting was a turning point. We recognized the safety precautions that
we would need to warn others about. We also realized the emotions that this
intergenerational knowledge transmission could stir up.

In the following months, several other villages started to revive dug-wells,
cleaning and restoring them at their own expense. When invited, MPA pro-
vided some guidance. When extensive repairs were needed, MPA contributed
materials such as bricks and cement. In poor villages inhabited by low castes,
we contributed more bricks and cement, and in return we received plenty of en-
thusiasm and encouragement. Under my co-leadership with the MPA founder,
MPA directly facilitated the revival of sixty-four dug-wells, of which forty-one
were repaired. Many more were revived by locals on their own.

Our intervention had two conditions: first, the cleaning event must involve
as many people as possible from all families present in the village; second, any-
one and everyone should be able to access the well on their own, forever. This
second condition was of course a pass for free riders, but we felt it was neces-
sary to avoid the risk of castism. After my departure, discussed below, MPA’s
strategy slightly changed by only working with Mahadalits, hence preventing,
instead of fighting, discrimination by privileging the most discriminated.

As the news about the success of the dug-well was spreading on its own, the
local governmental administration of the Khagaria district, a heavily arsenic-
affected area, decided to financially sustain the program by reimbursing part
of the expenses to the families who revived their dug-well or dug a new one
and by digging new wells in Mahadalit villages. When my colleague and MPA
founder excitedly related the news of the government’s interest in the project
to the organizations’ heads, they laughed it off. “There isn’t enough grease in
it to make the machine work,” they said. As we evaluated the hypothesis that
the local government could be serious about collaborating, we all shared the
same mixed feelings; we were enthusiastic that our initiative had the important
partnership of the government but also wary that such a people-led initiative
could be instrumentalized and misappropriated, or could then be perceived as
yet another relief operation.

I went to meet the district magistrate of Khagaria (a representative of the
state and the highest state authority of the district) at the time, Abhay Singh,
and found him very approachable and sensitive to our concerns. He said he
completely understood my preoccupations and was willing to set up a process
with which we were also comfortable. We decided to work through the Na-
tional Rural Development Employment Guarantee Act (NREGA) so that the people themselves would continue to clean the wells but their work would be paid as wage labor. Despite the NREGA being relatively new at the time, cases of misappropriation already abounded. It was helpful that SAMTA, the local NGO operating in Khagaria, had a strong reputation for honesty.

On the other hand, as we weighed the alternatives, we realized that, given the circumstances, the NREGA was the best we could hope for in terms of government support. Mr. Singh rightly argued that while the dug-well was for the locals’ benefit, it was also a public good for which the state was paying elsewhere, as with roads and bridges. In this case, however, public ownership did not mean government ownership, and we could still clarify that regular maintenance was the villagers’, not the state’s, responsibility. Shortly after our meeting and the revival of just a few dug-wells, Abhay Singh was transferred, and the initiative slowed down. Perhaps there was not enough grease in it after all.

After the first years of MPA’s active engagement (2007–10), we had no budget for the dug-well intervention for the next two years. During that time, the project mostly ran itself, with MPA continuing to provide support, although that support was more reactive than proactive. Financial support for the next five years (2012–17) only included a very limited budget for dug-well revival.

At that time, my own involvement with MPA changed. During the second major flood we endured, I was severely hit by several major diseases in the span of a month. While I weathered them alone, there came a point when I was so weak that my ability to work was impaired, and I could not remain in Bihar without being a burden. Once recovered, I managed to return to India as a fellow in the United Nations Development Programme, and then as a water expert for the World Food Programme. During that time, I supported MPA from afar and visited whenever possible.

While I intended to eventually return to work for MPA, things took a different turn when I was offered the opportunity to continue my education with a double PhD in anthropology and environmental studies as Yale University. Although I was always writing, talking, and thinking about Bihar and its waters and people, and I spent all my summer holidays there, I was not able to be as involved in MPAs daily routine as I would have liked. However, having finished my third year in the program early and acquired research funds, I moved back to India for three more years, mostly in North Bihar. The events described next happened during a period when I was no longer involved in the daily management of MPA but rather participated as an advisor, a member of the board of trustees, a close friend to most of those involved, a frequent visitor, and also, at times, an enthusiastic host for MPAs members.

As our teams were spreading themselves thin under conditions of financial distress, several villages in the Khagaria district took matters into their own hands. In 2015, MPA detected arsenic pollution ranging from 50 to 400 parts
per billion (ppb), with a seasonal average of 250–300 ppb, well above the permissible limit of 10 ppb. As a result, the management committee of the nearby temple, which had been set up to renovate the building, decided to divert part of their funds toward reviving the dug-well in front of the temple. They also pledged to maintain the water of the dug-well as a service to the community. Prioritizing the dug-well over temple repairs or embellishments is far from commonsensical, but the temple management committee clearly stated that the dug-well not only served as a source of clean water but also represented hope for a village suffering from high mortality rates (in all probability due to arsenicosis and consequent cancer) and that, as a collective resource, it would be the symbol of a cohesive community. The temple revival had therefore opened the possibility of collectively prioritizing and managing water.

Several more villages joined the movement on their own. In West Champaran, in one village that was—and remains—recurrently flooded, the inhabitants had been asking the government and the NGOs working in the area to financially help them to set up a dug-well, which was not, unfortunately, considered a priority by these institutions. Then a villager donated a piece of land for the purpose, an important step toward dug-well construction. In another area, I saw one specific revived dug-well being visited daily by persons from different villages and different castes, including Dalits.

Distance to a water source is no longer a deterrent: several women told me that getting a handpump from their guardians (i.e., husbands) had not been easy. Yet, now that they were aware of its problems, they preferred to fetch drinking water from the village’s revived dug-well and only used handpump water for bathing, cleaning vessels, and similar domestic uses. I also heard of a Rajput woman, whose husband had recently died of cancer, who renovated a dug-well at her own expense as an offering to her village, inviting everyone to use it, including the Muslims of the nearby settlement.

Outcomes and Challenges

Practically, the dug-well fetches cleaner water, which leads to substantial improvement in the local living conditions, not only by decreasing the negative health impacts of dirty water but also by reducing the impact of related ailments on the family budget through medical expenses, lost time, and depurated energy.

The dug-well renewal has not always been easy. Despite its successes, the program reached its objective only partially. In several villages, residents cleaned the dug-wells a few times, only to stop doing so once MPA began visiting less frequently. Of course, the project would have benefitted from a renewed commitment of funds. On the other hand, MPA has been proud of the self-
supporting ability of its work, which proves the sustainability of its signature self-management formula. When I visited Ranvir Prasad's village a few years later, the great-grandson had taken over the management of the dug-well. Instead of hiring laborers, he cleaned it by himself, involving his peers from other families in the same village—although no low castes inhabit that particular village. He also reassured us that passersby could access the water of the dug-well, a fact that we confirmed with the inhabitants of nearby villages.

Other internal and external political forces have continued to push for the handpump, a sociopolitical dynamic that deserves a longer discussion (Cortesi, forthcoming). However, there was not a single case in which locals were unsatisfied with the quality of the water obtained from a well-maintained dug-well. In the villages that discontinued maintenance, the benefits of the dug-well are still recognized. Most often the reason for discontinued maintenance was lack of agreement on cost- and labor-sharing arrangements. "The water tastes sweet, they say," my field assistant and MPA colleague Pradeep commented ironically, "but cooperation does not."

Even in villages where the dug-well revival had been discontinued, however, it has become a more common practice to discuss water quality. These conversations now also involve women, which was not the case in the past and is not the case in other areas of North Bihar. While women are not supposed to bother about, understand, or talk about water quality, I have been privileged as the interlocutor of choice for those conversations. This does not mean that women are to be charged with yet another task, to also manage water resources. Although women are assigned the hardest of tasks as laborers, cleaning the dug-well is not, for a variety of reasons, considered their prerogative, and I have not found women interested in doing so. As a result, dug-well maintenance was discontinued in particular in villages where male seasonal out-migration is very high. Women who are left to fend for themselves and the family often have to cut corners, their lives becoming even harder than usual in the patriarchal society of North Bihar.

One way in which MPA has been successful has been to intentionally oppose the reproduction of castism through the wells. When replastering and repainting the top of a well, the name Megh Pyne Abhiyan has often been written on the chabutra, the platform. I remember telling people that the wells were theirs, not MPAs, but then realizing that I was simply not reading the situation correctly. Typically, writing the name of an Abhiyan (a campaign, a social movement) is meant to be a sign that no individual owns the well, that the well itself is a social initiative. In a society where access to wells and their water has been discriminatory for as long as people can remember, naming the well after a social movement signals inclusion and gives implicit permission for anybody to access its water.
Caste-based discrimination is notoriously hard to overcome, but I have yet to encounter a case in which a dug-well renewed under the aegis of MPA was manipulated to reinforce caste-based or religion-based discrimination. Fortunately, MPAs’ principles against castism dovetail with contemporary trends in which refusing water is one of the types of *chuachut* (impurity as a basis for discrimination related to caste, religion, or gender) that is increasingly considered an old and cruel practice.

There are, however, many subtle ways in which caste discrimination continues to run through water. I have seen members of the Dalit castes asking for water to be poured on their palms or carrying their own glasses to avoid “contaminating” public vessels. I have heard of people cleaning vessels even though the person using it had not touched it with their lips, with the excuse of caste “contamination” affecting the water through some watery “connection.” Since I myself look like I do not belong to the caste system, I have been served tea in plastic disposable glasses instead of glass or steel ones, an example I report not to divert attention to those whose daily life is violated by humiliating biases but instead to clarify how dispersed and diffuse those prejudices are. However, since 2015, I have not been able to visit the area as sufficiently as necessary to account for the recrudescence of religious intolerance that India is increasingly facing.

North Bihar is an area with recurrent disasters, where citizens have become accustomed to relying on government schemes and relief activities, which commonly operate through funds and technology transfers. In contrast, the MPA project has made evident that dug-wells—and water more generally—can be invested in and managed directly by its users, without the need for external forces or copious resources. This is not necessarily an argument against the state’s involvement in water supply, nor does it undermine the right to water, but it demonstrates that people, in certain contexts, do not have to passively wait for the state to provide them with water.

As a result, however, the experience of dug-well renewal has not been without conflict. *Tikedars* (“fixers,” middlemen), in particular, have not taken kindly to our refusal of their mediatory services. Nor have high-caste villages taken mildly our regrets to their offer to renew their well (or their pond), whose water they were not going to share. We received threats of different kinds, fortunately never fully acted upon. And yet, we have taken those instances as proof that our projects have succeeded in challenging local ideas about how social development interventions work, bypassing some, if not all, relationships of patronage.

In a context wherein both governmental and nongovernmental interventions are designed as packets of ready-made solutions, where only the experts are entitled to teach, MPA broke the mold by not presenting itself as an expert or a decision-maker on water management. Instead, the anthropological re-
search methodology of participant observation and informal interviews, as well as the campaign’s modality, placed MPA squarely in the position of the learner. The intervention was an occasion for provoking and facilitating informed conversations on water issues. Locals taught us about dug-wells, and MPA merely spread the information about their relevance. MPA tested the water and confirmed the results through authorized laboratories, yet the results were shared with caution and only in comparison to people’s impressions about their health. No recipe for cleaning was provided, under the assumption that the best recipe was available locally through the village elders, which was confirmed by post-cleaning tests.

This method built confidence in local knowledge vis-à-vis official/government knowledge. In a few villages, this experience has promoted local knowledge beyond water, with residents openly discussing the disadvantages of modern agriculture vis-à-vis earlier methods and finding new arguments to antagonize genetically modified agriculture. Lastly, where dug-well revival has been successful, the confidence in local knowledge has, to a certain extent, countered the charismatic value of “modern” objects and technologies to the advantage of tried and tested local knowledge. The pride and value of the hand-pump as a status symbol declined in the villages where residents readopted the dug-well. This change was also partially felt by the younger generations, who were more susceptible than their elders to the “gadget charisma” of the handpump.

The Anthropological Difference, Limitations, and Learnings

Reflecting back, there were important limitations to the way in which, as an anthropologist, I engaged with the project—I do have regrets. First, perhaps out of caution given the open prejudice against social scientists and anthropologists in particular in the field of water management in India, I did not explicitly market the dug-well revival initiative as an anthropology-based water and knowledge management project. This lack of an explicit “branding” discounted the relevance of the process in the media’s wider representations of the project, which focused more on the water testing results and less on the process of reviving the well and the competence it takes to design and implement such a project. As a result, I feel that the project’s social potential was diluted.

Similarly, I was not successful at involving other anthropologists. While MPA was—eventually—enthusiastic about having more applied anthropologists on board, we failed to recruit any, which may also have been due to the minimal salary offered. As noted above, I continued to help remotely and with annual visits of a few months at a time, but a stronger presence of applied anthropologists would help (1) renew the attention to the process of dug-well
revival, without which the project would fail its potential; (2) enable MPA to reinforce its progressive stands against castism; and (3) expand the possibilities of MPA as an institution.

Most importantly, I regret the financial consequences of my modality of work for MPA. My full attention was dedicated to covering a large area, managing five organizations, training and supporting teams, testing the water, waving in new projects, and engaging in conversations with stakeholders across the social spectrum and ecological habitats in an area as large as Maryland and as populous as California. But I did not realize that such a simple project, with its implicit anthropological critique of mainstream development, and ironically even its small budget, would not, and did not, result in the enhanced popularity with funding agencies that MPA deserved. I regret not attending to the financial health of the organization, whose lack of funds eventually resulted in its untapped institutional development.

We were doing something innovative, simple, effective, commonsensical: I assumed that funding agencies would understand the value of this and would support the project and the organization. While I remain convinced that MPA is the hidden treasure that every funding agency wishes to find, I was proven naive: projects do not sell themselves, at least to funding agencies. The project’s success was guaranteed by its so-called beneficiaries, who spread the news, and by those who took up the initiative on their own. MPA’s popularity spread in rural Bihar as floods do. Its popularity grew in India, too. Media proclaimed MPA and even the dug-well revival project the success story of Bihar, as did the Government of Bihar and the Government of India on more than one occasion. MPA’s founder won nominations and recognitions. Organizations wanted to visit and learn from our work. But MPA and its members remained on a shoestring budget that was unsustainable for our families and often forced us to take personal risks. After I left, there were long months when MPA’s members had no salary to live on. As such, they become prey to the sector’s vultures: organizations, research institutes, even a doctoral student(!) that promised funds only to extract ideas and research that they then portrayed as their own.

Theoretically, the dug-well project yielded at least three or four interesting results. First, by unpacking the concept of tradition, this research has built confidence that a development project, when informed by in-depth ethnography, can reinterpret traditional practices as an arena of sociopolitical action in order to avoid tradition’s undesired effects, for example the reproduction of caste-based discrimination. Because of the loopholes in the traditionalist discourse—a discourse that, particularly in relation to water management in India, overplays the importance of tradition and underplays its perils—we have risked “throwing away the baby with the bathwater” (Cortesi 2014). One of the findings of this project has been realizing that the way out of the loopholes of the traditionalist discourse lies precisely in engaging with the concept of tra-
dition at the level of program design and implementation while countering its explicit use to avoid discursively hiding covert interests. At MPA, we worked out practices that valued “the old” if and when it is reinterpreted along progressive local values. Gauging the future prospects of a project, after all, takes awareness of both the historical and the contemporary—contexts that applied anthropologists are equipped to obtain and to juxtapose.

Second, while development is often accused of being “the anti-politics machine,” strengthening traditional powers and even depoliticizing political issues, this project has been designed in antithesis to the handpump as a politically oriented gift (Ferguson 1990; the handpump gift is discussed in Cortesi, forthcoming). Doing so also required confronting the political stakes of the project, hence refusing the standard modality of development interventions and avoiding the facilitation of other mediators. Even when we agreed to partner with the local administration, the lack of opportunities drastically reduced the lifespan of such collaboration. In general, it was the anthropological rationale to put words to MPA’s instinctual reluctance to become the instrument of power disputes.

Third, while this may have occurred elsewhere, this applied anthropology project has set a local precedent in terms of the feasibility of reinterpreting the development cycle as a continuum. While conceptually it makes sense to distinguish activities of research (including feasibility), project design, project implementation, and evaluation, these phases do not have to be temporally distinguished, at least not, as narrated above, after a robust initial research phase. Instead, uninterrupted research conducted by the same practitioners can inform the various phases of design and implementation in real time through continual readjustment and fine-tuning. MPA demonstrated that anthropological involvement should not be restricted to the pre-project feasibility study and the post facto evaluation report, as is often the case. Such restrictions, when applied, undermine the ability of anthropologists to lead development organizations and their human resources and to deploy ethnographic data in social development projects. This project stands to demonstrate that applied anthropologists do not simply have expertise in data collection but can also best serve development interventions when involved in all phases of the process.

Finally, the ethnographic research influenced the NGO’s practices in honing their members’ competence to work across multiple disciplinary fields, between the natural and the social sciences, thereby revealing the role that applied anthropology can play in managing an inherently interdisciplinary matter such as water. Involving the NGO’s local fieldworkers in all phases of research convinced them that the way in which the project was implemented was key to the success of the project even more than the technology itself. This awareness increased the fieldworkers’ ability to adjust their work to locally meaningful values instead of simply serving donors’ priorities.
In MPA’s dug-well revival project, anthropology, both in its research methodologies and its applied interdisciplinary experience, has proven critical to unpacking the complex dynamics of water management in disaster-prone areas, upsetting problematic modalities of development interventions that were well established in the area, dovetailing with progressive trends toward equality, and building confidence in local knowledge. Over the course of ten years, and even more so in the years after the end of the active project, the utility of anthropological engagement has been proven by its inconspicuousness. By being absorbed into the everyday and no longer sticking out, this applied anthropological commitment has proven its ability not only to understand society but also to become part of its commitment to improve it.

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Notes

1. For an example, see the well-known short story by Munshi Premchand, “Thakur ka kuan,” which narrates the deadly violence imposed through dug-wells on lower castes in many parts of India.

2. At the time of writing, Mahadalits are a political category of extremely discriminated Dalits initiated by the State Government of Bihar that affords special status to twenty-four Dalit castes.

3. The National Rural Development Employment Guarantee Act is a governmental scheme for guaranteeing one hundred days of salaried work by the public utility.

4. In fact, my gender was perhaps a reason for the job offer in the first place, given that the founder of MPA had taken several measures to ensure gender equality despite the deeply patriarchal context.

5. With the exception of the next paragraph (starting with “Second” and ending with “power disputes”) that makes reference to party politics, I use the adjective “political” to describe that which is affecting the distribution of social power toward a more just
society. Neither MPA nor my anthropological work has any interest in any sort of politics.

References


