Changes in habits, preferences, and land use in Parala

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Why Parala

About a year ago, Prof. Levin put me in touch with Dr. Madhav Gadgil who, in addition to being one of India's premier ecologists, is also deeply involved in conservation work in many parts of the country. After exchanging a few emails, we both felt that it was important for me to personally observe the problems that conservation in India is facing. As a result, he put me in touch with one of the founders (Shantaram Bapu Pandere) of an NGO called 'Bharatiya Lok va Paryavaran Vikas Sanstha' (Lokparyay for short).

This NGO works with tribal communities in a number of villages located close to Aurangabad. While the NGO is primarily concerned with obtaining land rights for tribal families, the founders of the NGO and their associates are actively working on many related issues including reforestation, education, research and marketing of non-timber forest products, women's rights, and conservation. With the founders' help, I have been visiting Parala, one of the villages they serve, in order to talk to the people there and to learn more about the social aspects of conservation in India.

I first visited Parala for two days in December last year. While there, I got a chance to talk to some of the tribal families. I stayed at a hostel that the NGO has helped build to aid in the education of tribal children, and so I was also able to interact with a few of the enrolled children. I also got to converse with the staff members that run the hostel and take care of the children. Additionally, I got to visit a biodiversity park that a few of the locals have started with the NGO's help. The biodiversity park is a restoration effort that, in addition to preserving biodiversity, also aims to preserve the knowledge and culture associated with this biodiversity. Although my visit was short, there were a number of things that were brought to my attention through the conversations I had with the villagers and with the founders of the NGO.

One of the things I learned was that many of the villages that the NGO serves are fairly remote and have had limited exposure to urban centres, but this is beginning to change. Roads and public transportation now connect these villages to neighboring towns and cities. Aurangabad, a rapidly developing small city, is no more than a few hours' bus ride away for residents of some of these villages. Weekly bazaars draw in people from a number of neighboring villages and serve as an important source of cultural exchange since the sellers and wares on display come from many different parts of the country.

Due to the limited contact, many of the tribal villagers have retained at least

part of their traditional lifestyles. Especially those that now have land rights lead fairly autonomous lives based on subsistence farming, foraging, fishing, and animal husbandry. Some tribepeople also hunt. However, inclusion in the larger market economy of the country and exposure to different cultures has led to some noticeable changes.

Although diets have remained fairly constant, other aspects such as clothing (both style and material) and language have changed. The biggest change that was evident to me was in the choice of crops on villagers' farms. Some part of each farm seems to be dedicated to growing cotton, which is primarily a cash crop. While the food crops themselves might not have changed much, the seeds for these crops do not come from native stock. Native varieties have been replaced by hybrid varieties that require large amounts of external inputs. Moreover, the seeds produces by these crops are not usually viable. Resultantly, the villagers are forced to buy seeds and chemical fertilizers and pesticides every year. Provided with adequate inputs, these new varieties produce very high yields. This enables the farmers to earn some money through their surplus produce, which in turn incentivizes them to keep farming these new varieties. Whether or not these new crops are truly profitable is an open question that I will discuss further in a later section.

Once I decided that I wanted to work on the question of how diets and dietary preferences affect biodiversity, I realized that this tribal community could be a good place to start. Particularly in order to investigate and identify the forces that influence diets and food choices in India, I thought that talking to the people here could be informative. The prevalence of a fairly traditional diet and lifestyle makes this a good baseline to compare other communities against. Any community that I will have access to will probably have undergone similar or higher levels of change. The green revolution has touched almost every part of India that is connected to the market system and native varieties of food and cash crops have been supplanted by hybrid varieties everywhere. The social and economic forces acting on the people here will likely be the same in other communities as well and will probably have manifested themselves to varying degrees.

In order to start my research, I spent a week in August 2017 in Parala and was able to interview a few different individuals and families. These conversations helped me learn a bit about the dietary choices of the people here and about some of the relevant economic and social forces. In conjunction with correspondence with a few other conservationists and scholars in India, these interviews have also provided me with an idea of what the future of Parala and its tribal inhabitants might look like. This report is written for the purposes of recording the ideas that arose out of my time in the village and to record and contextualize my predictions.

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Chapter 1

Settings

1.1 Climate, terrain, and ecology

The first thing that struck me as we were approaching the village was the near complete absence of vegetation. There are a few scattered shrubs growing in the rocky ground, but for the most part, the dirt road leading up to the village is surrounded by what appears to be desolate, barren land. I learned later that this entire area used to be heavily forested as recently as 40 years ago. The founders of Lokparyay, Bapu and Mangaltai Khinwasara, told me how they used to be scared of traversing this road when they first started working here because of the dense jungle. Some of the villagers themselves recalled childhood stories of how they would be stuck on a hilltop not daring to venture down because of the lack of visibility caused by dense vegetation. Only when they saw animals using some almost trail that they could not possibly have otherwise known about would they be able to descend.

The forest contained many different tree species. *Saagwan* (Tectona grandis), *palash* (Butea monosperma), mango (Mangifera indica), *chincha* (Tamarindus indica), *amla* (Phyllanthus emblica), and a myriad of other woody species were commonly found here. There were a host of different *ran bhajya* (forest vegetables) derived from herbs, vines, and shrubs that were also frequently encountered. All of the plants were known to the tribal people and were used for various different purposes such as for food, medicine, and construction material. The people depended on the forest for their sustenance, survival, and well being. Many of the plants also played important roles in religious ceremonies and cultural activities.

The reason for the disappearance of the forest is not yet a fully settled question in my mind. Apparently, foresters and the state government accuse the tribals of clear-cutting the forests for firewood and to practice their slash and burn form of agriculture. Conversely, Bapu, Mangaltai, and the tribals blame corrupt government officials for granting private businesses and prospectors unhindered access to the forest's extensive timber resources. These entities often

employed tribals to cut down trees for them and payed them for the work. Fueled by rapidly growing cities and high demand for furniture in the big cities, these profiteers irresponsibly abused the forest. Not being cognizant of the facts, I am unsure as to who is to blame, but given the presence of plantations on supposedly protected forest land and the injustices that the tribals are still subject to, I am more inclined to believe the latter story.

For the most part, the landscape is made up of gently sloping hills and vast tracts of open, rocky land. There were no large mammals that I could see, but tigers, a few different species of deer, wolves, and smaller cats like the jungle cat used to be quite common here. The villagers told me that the degradation of the forest was accompanied by the concurrent exodus of most animals, large and small. It is interesting to note however, that as soon as the biodiversity park was established, a number of smaller animals, particularly reptiles and insects, started returning promptly. A common Indian monitor (Varanus bengalensis) and a large constrictor have taken up residence within the park recently as well. Much to the consternation of the workers who painstakingly manage the park, some species of fatally poisonous snakes have also quickly returned.

Many bird species have also made a rapid local recovery. The hostel where I was living abuts the park and every morning I could hear peacocks, two different dove species, and a number of different passerines like orioles and purple sunbirds. Swallows, much more numerous in the dry season (August is in the latter half of the monsoon season), also made a few appearances.

The returning birds brought new plant species with them. After the reappearance of the birds, new seedlings started to take root. Many different herbs, vines, and woody plants have now re-appeared within the park. The park has started expanding of its own accord. Given the rapid regeneration following reintroduction and care of a few native tree species, Lokparyay accuses the forestry department of gross mismanagement of the area's forest resources. They claim that following independence, if the department had simply left the forest alone, it would have taken care of itself. Instead, their meddling has led to the current sorry state of affairs.

Out of the park, even though exploitation of timber resources has now ceased, probably because there are no trees left, the local flora and fauna have had a much harder time reclaiming the land. Much of this can probably be attributed to the drought that has afflicted this region for the past 10 years. The monsoon season lasts from June until the beginning of October. From precipitation data available online, it looks as though Parala and neighboring villages have historically received around 600 mm of rainfall annually. Most of the precipitation occurs in July and September and there is negligible rainfall in the non-monsoon months. The rain also appears to be fairly uniformly distributed over the monsoon months with a few very heavy rains every year.

For the past 10 years however, much of the region has been afflicted by drought and very unpredictable rain. This year for example, Parala had gone 48 days without rain when I arrived in the middle of what should have been peak monsoon season. There is also much regional variation in rainfall. On the second to last day of my stay, Parala experienced about 15 cm of rain in the

span of a few hours while villages only a km or two away only saw clouds and maybe a few drops of precipitation. A few of the older villagers I talked to spoke of times when they would have to be holed up in their houses for 2-3 days at a time because torrential downpours precluded any possibility of stepping outside. Far from being an aberration, this supposedly used to be a yearly occurrence but is now just a memory. I do not know if a strong scientific case can be made, but the villagers certainly seem to think that the loss of the forest has been responsible for the drought and their misfortune. If true, this would imply the presence of a feedback loop where lack of forest cover would result in lack of rainfall, which in turn would result in more trees dying because of the prolonged dry conditions. This would result in the forest's further diminution.

Bapu thinks that climate change is primarily responsible for the reduced rainfall, but it is impossible for me to comment on the relative contributions of climate change and deforestation to the paucity of rain over the past decade.

Some seasonal streams, rivers, and lakes in this area also depend on the rain. Since many of them have run dry in the last decade, farming has become a very tenuous enterprise. In order to alleviate this problem, an irrigation project was initiated in 2002 and completed in 2003. An embankment was built across the biggest perennial water body in the area, the Manyad river. Many farms in Parala have benefited from this project. While a number of the tribal inhabitants in the village now have access to water for their crops because of this embankment, many are still dependent on wells and rainfall even though the embankment has the capacity to provide them with what they need. This is because of social inequities and discrimination that I will touch on in a later section.

1.2 The people

Lokparyay aims to help many underrepresented and historically subjugated classes of people. Included among these are members of the Bhil, Thakar, Paradhi, and other scheduled tribes, scheduled castes, and a few different nomadic tribes. The people I interviewed during my visit this past summer belong to the Bhil tribe. Bhils comprise the majority of the underrepresented in Parala.

1.2.1 Living conditions

Many of my interviews were conducted in or just outside participants' homes. The houses I visited consisted of 1-3 rooms. In the houses with multiple rooms, one seems to be reserved for entertaining visitors. The kitchen, consisting of a *chulha* (earthenware stove), a few utensils, and some kitchen supplies, is in another room that is also used as a bedroom and storage room. In the houses with one room, the kitchen is in a corner of the room.

While talking to me, the people either squatted or sat cross-legged on the floor, and I was either given a *khatiya* (rope bed) or blanket to sit on. On a few occasions, women squatted on a smooth, gently sloping, low rock. A thin curtain separates one room from the other.

The Bhils that I visited either lived in the village of Parala itself or in the hills surrounding the village. In the village, the Bhil houses are concentrated in a small group along the outskirtsn. Apparently, every caste lives in a different part of the village. There is a well within each caste-based settlement and no individual from a lower caste is allowed to drink from the well belonging to a higher caste. No Bhil, for example, is allowed to drink from or even touch the water in a Maratha well. Farms are located outside the village boundaries.

Sanitation and facilities differ markedly between the Bhil occupied areas and those occupied by higher castes. While most of the village is serviced by public restrooms and a sewer system, the area occupied by the Bhils lacks any of this. The roads in most parts of the village are also wider and better maintained. The roads in the Bhil settlement are usually no more than dirt tracks. Even the Bhil farms are often worse off. Farms owned by the more prosperous and higher caste landowners draw all the water they need from the Manyad dam, but lack of resources and political clout often prevent the tribal people from making use of this amenity.

In the hills outside the village, houses are much more sparsely distributed. Residences are situated on hilltops from which the family's farm is usually visible. Neighbors seem to be separated by distances of at least half a kilometer. While all Bhils own domestic animals, they are much more evident here than in the village. Many goats and hens can be seen at the residences here. Cattle are also commonly owned, but the cowsheds are located elsewhere. During the day, the cattle and older goats are taken to graze while the young animals and fowl stay close to home. In the evening, the goats are brought back to the houses and the cows to their sheds.

The residences are either semi-permanent or permanent structures. I do not

know anything about the materials that they are constructed from or how they are constructed, but I was told that they are a significant step up from the lean tos that were their childhood homes when they were a more nomadic people. While the walls of the permanent homes are solid, thick plastic tarps constitute the outer walls of the less permanent ones.

A family living together consists of the patriarch and his wife and his unmarried sons and daughters. Three seems to be the minimum number of children per married couple. Married sons and their families usually settle down near their parents and help with the farm work. However, sons may sometimes choose to move farther away, particularly if his wife and parents do not get along. Daughters move to their husbands' villages and visit their parents only on special occasions like religious festivals and births and deaths in the house.

1.2.2 Food

As mentioned in the previous section, most of the food a Bhil family consumes comes from their own farm. The crops grown are drought resistant, dry region crops. Many legumes and a few cereals are well suited to the conditions here. Chief among beans and lentils are *math* (Vigna aconitifolia), *kulith* (Macrotyloma uniflorum), *moog* (Vigna radiata), *bahimung*, *toor* (Cajanus cajan), *waal* (Lablab purpureus (?)), and *harbhare* (Cicer arietinum). The main cereal is *bajri* (Pennisetum glaucum). Wheat is a less commonly grown cereal. Corn is grown on the larger farms, but I did not see any on the few Bhil farms I visited. Radishes and onions are grown as well.

A significant part of their food is foraged. If they see a plant in the wild that they know and like, they will take it home with them to eat. They often let what would usually be considered to be weeds grow in their fields if they know that it is edible. After one of my interviews, the hosts took me to their farm to taste the leaves of an *ambadi* (Hibiscus cannabinus) plant that had inadvertently established itself there. It was fairly sour, and to me, delicious.

Many different parts of wild plants are used. Some recipes are made from flowers, others from leaves, and others from seeds and fruit. The plants and dishes that I commonly heard about while talking to the people were: *koyad, troth, gethyacha phool, phangyachi bhaji, tandudka, kundra, vatla, patri, shevgyachi bhaji*, and *saratechi bhaji*. I had never heard of any of these growing up, and neither had my other city dwelling relatives and friends that I mentioned them to. The fruit from *amla, chincha, sitaphal, mango* and many other trees and shrubs are also harvested and consumed in various forms. A number of plants also have medicinal uses.

While some leafy vegetables like spinach and fenugreek are also sometimes grown, these and some other vegetables usually come from the weekly vegetable market. Rice, cooking oil, salt, and spices are also purchased from the market. Purchased food accounts for a small, but important part of their diet.

Crabs, fish, chicken, and milk (both cow and goat) are the primary sources of animal protein. Crabs and fish are caught in the nearby water-bodies, while poultry, cattle, and goats are domestic animals. Mutton consumption seems to

be reserved primarily for special occasions. None of my interviewees hunt any more, although there is a lot of extant knowledge about how to trap different animals, when they are abundant, and what the animal meat is useful for. For example, the meat of *pavat*, a species of dove, is supposed to be eaten if a fish bone is stuck in one's palette or digestive tract. It is believed to soften and melt the bone.

1.2.3 Livelihoods

A Bhil family with privately owned land is fairly autonomous. The size of a farm varies between 3 and 10 acres. In a good year, they can get 2-3 harvests from their farms, which, supplemented with foraged food, milk and meat products, and some food purchased from the market, is enough to meet their dietary need. The main sources of expenditure and dependence on external markets are clothes, farming and household equipment, and some food products that they cannot produce on their farms. Some money is also spent on occasional doctors' visits. Cash crops such as cotton are their primary source of income. Surplus produce and a few other jobs supplements this income.

The much larger farms in the neighborhood employ the Bhils as laborers. Men are paid more than women although it seems as though women work longer hours and do more intricate work than the men do. This used to be one of the primary sources of their livelihood, although with the acquisition of private land, they are not as dependent on this source of income anymore. Some of the tribals are also employed by the forest department in various capacities. One of the people I talked to had been hired to plant trees during one of the many reforestation drives and is now responsible for taking care of those and other trees. Many locals are hired temporarily during planting projects.

Neighbors help each other out in difficult times, but the recent prolonged drought has adversely affected many of the tribals. Unable to procure the required sustenance from their land, they are forced to seek opportunities elsewhere. A few of the most affected people work in sugarcane plantations in Gujarat and other parts of the country. They spend 6-9 months of the year at the plantations and return in the summer months to help their families in the farms. The work at the plantations is extremely strenuous and the working conditions are appalling. They are required to work at whatever hour their employers tell them to, be it in the darkness of the middle of the night or under the scorching midday sun. Additionally, working on these sugarcane plantations often creates a debt trap. The contractors pay the workers an advance and this advance is paid for in the form of labor. However, it is almost always impossible to completely pay off the loan and a debt is created. To repay the debt and whatever new loans they might take out, the Bhils have to keep returning to these plantations.

Most parents who work on the plantations take their children with them. Since these children spend so much time traveling and away from home, education is impossible for them. With the opening of the hostel in Parala however, some of the more fortunate children can stay back and attend school year round.

1.2.4 Education

Education among the Bhils used to be a luxury, but is now increasingly seen as a necessity for survival in what they perceive to be a world of relentless competition. Only one of the people I talked to had completed his secondary school education, although it had taken him a long time because of trying childhood circumstances. The others had been in and out of school and, after a few years, had given it up completely. Most of them were unable to get through primary school since they had to start working as farmhands and household servants at a very young age. During our conversations, many of my interviewees expressed great regret at not being educated. They talked about the many ways in which they are disadvantaged simply because of not being able to read and write. Many children today seem to have a much better chance of availing of education because of the greater security afforded by the recently acquired land rights and the hostel.

The hostel was established 5 year ago with the sole purpose of giving at least some of the children whose parents have to be away for most of the year a chance at a better life. It presently can only house and feed around 40 children, which is a small fraction of the number of affected children. The effort is funded entirely through private donations. Some equipment, like bicycles for the children to get to and from school, is provided by other NGOs. Lokparyay has made a committed effort to not accept money from governmental sources in order to remain uninfluenced by politicians and politics. While this does sometimes hurt them because they are unable to make use of government schemes, it gives them leeway in structuring the hostel the way they deem best.

The hostel staff assumes complete responsibility for admitted children. They feed them, teach them personal hygiene (not always a given with tribal children), make sure that they get plenty of time to play and explore, and also ensure that they do their homework and are on top of their lessons. The children are also required to tend to the gardens adjoining the hostel. Older children help in household chores like milking the cow, doing the laundry, and taking care of the younger ones. The staff makes sure that the children get to school on time everyday. This safety net allows the children to make full use of locally available education.

Local schools are not very good however. Government funded schools in India severely lack funding and infrastructure. The lack of funding translates into state run schools not being able to attract talented teachers. The teachers that are employed are not well trained and are usually not qualified to be teaching at all. On the few occasions when the teachers do show up to work, they are usually at least an hour late and they customarily leave early. Apparently, catching the teachers napping during classes is not uncommon. I asked Bapu why the children even need to go to school if they do not learn much there and in fact learn much more from their caretakers in the hostel. He told me that in order to obtain hall passes for board examinations, the children need to have a certain level of attendance.

Increasingly, as the Bhils become aware of opportunities elsewhere, they are

sending their children to more distant privately funded English boarding schools where the educational prospects are far better.

1.2.5 Personality

Most of my interviewees, both men and women, were easy to talk to and were forthcoming with answers to my questions. After the first few minutes, the conversations would become quite free flowing and very informative. To me, they seemed like simple, honest, and trusting people. Almost all of them were fluent Marathi speakers (much more so than me) and were good story tellers. There seemed to be no hesitation on their part in telling me about all parts of their lives, even the difficult and distressing times.

They also seem to be a very passionate people. Often when they were telling me about the injustices that they have been subjected to, their voices would rise and their manner of speaking would change noticeably. They certainly do not seem to think very highly of foresters and the Indian government. At the same time, there are people that they are extremely devoted to. Almost everyone I talked to spoke reverentially about Bapu and Mangaltai and expressed gratitude for all that they have done. A few others that have worked amongst and for them also seem to have gained their respect.

1.2.6 History

There does not seem to be much known about the Bhils. This seems strange given that they are the third largest scheduled tribe in India. Spatially isolated populations of Bhils are present in many different regions of western and central India. In total, according to a 2011 census, their population adds up to about 16 million individuals. The spatial isolation of different groups has led to two hypotheses about Bhil origins:

1. Either that the term Bhil has been used to describe a number of unrelated forest dwelling tribes

2. Or that the Bhils stem from a single tribe and their current spatial segregation is a result of environmental and social pressures.

There is not much evidence to corroborate or disprove either hypothesis yet. Although Bhils from different regions recognize each other as members of a single group, many differences exist. Tribe members from different regions do not seem to conform to any particular body type. Further, although all the tribes now speak languages that are composites of various Indo-Aryan languages, there are local differences. Also, there is no evidence in their languages of elements predating the Aryan invasion of India even though it is commonly accepted that Bhils were already well settled in India when the Aryans arrived. Economically and culturally as well, there is tremendous diversity across the few groups that have been studied.

While there is some literature on the Bhils of Rajasthan, there is little to be found about the Bhils in the hills surrounding Aurangabad. The only reference I have been able to find so far is in an appendix in the 1941 census of India. There are some references to the Bhils in Indian mythology, but like most Indian history today, their history essentially begins from colonial times.

The Bhils were most likely a forest dwelling people that practiced a form of shifting agriculture. There are many references to them in the Ramayana and the Mahabharata. In fact, based on accounts of his life, the author of the Ramayana, Valmiki, himself was a Bhil. There are many different mythological stories about the origin of the Bhils, including one that involves a great flood. The flood was survived only by a *dhobi* (clothes launderer) and his sister. Their first son went into the forest and the Bhils are believed to be his descendants. Other origin related stories include curses, blessings, magic, greed, love, and treachery.

In more modern times, there are some references to them as early as about 600 A.D., but then there is a large gap until the arrival of British writers and historians. Bhils residing in areas near the one where I visited have apparently had run-ins with many different invaders. They were initially disposessed of some of their lands by the Rajputs probably around the 6th or 7th centuries. This was followed soon after by the arrival of the Marathas. While the Rajputs treated the Bhils quite generously, the Marathas were much less tolerant. There are stories of Bhils being flogged and hanged without question, of being thrown over cliff-sides by the hundreds, and of their women and children being mutilated and killed by the Marathas. It is probably during this time that their range contracted to the hills of this region from where they retaliated by raiding the villages in the plains. Travelers passing through the hills were always in danger of being attacked and robbed.

The Bhils have long been associated with dacoity and great cruelty. The areas they inhabited were considered extremely unsafe unless one traveled as a member of a large party. Especially during colonial times, the Bhils were responsible for numerous train and stage-coach robberies. The people I talked to, however, provided me with a very different perspective.

The Bhils consider their actions to be completely justified as the robberies were their way of fighting for freedom and helping out the poor. They consider themselves to be modern day Robin Hoods who stood up to the ruling classes and served those who were oppressed and had no power. They revere the leaders who often led these heists. There are tales told about the leaders' resourcefulness and intelligence and how it would have been impossible for the British to catch them if they had not been betrayed. Even today, there is a lot of resentment amongst the people against those who mistreated and villainized them.

Although India has now been independent for 70 years, the lot of the Bhil in these parts has not improved much. The stories that people told me about their childhoods and most of their adult lives were ones of severe want and hardship. While the ruling class might have changed, the Bhil's position in modern society is pretty much the same as it was pre-Independence. This is not surprising given that the mode of development and progress that independent

India has adopted is strongly anti-rural. The Bhils in their current state as only incidental contributors to the Indian economy are easy to overlook and exploit. Recent improvements that have come about in the Parala Bhils' standards of living can almost exclusively be attributed to the efforts and activism of Bapu and Mangaltai, the founders of Lokparyay.

1.3 Lokparyay

1.3.1 Land Rights

Although only recognized as a registered NGO in 2002, the founders of Lok va Paryavaran Vikas Sanstha have been working with Bhils, Paradhis, Thakars, and other disadvantaged communities in the area since the 1970s. The biggest hurdle for them has been in acquiring land rights for members of the communities they serve. When asked about their lives before they were granted formal land rights, my interviewees told me about how forest rangers were free to seize whatever land they wanted to, whether it was cultivated or not; how the more prosperous higher caste farmers would often graze their livestock on the tribal people's crops; how their produce and grains were frequently stolen; and just how difficult it was to practice any form of agriculture. They did whatever they could to make ends meet, but despite their best efforts, their lives were ones of severe hardship and poverty.

Most of the Bhils started working as laborers when they were still children. By the age of 12, some of them would have already started working as servants and farmhands for the more prosperous Maratha farmers in the region. They would have to take out their employers' cattle at dawn, clean out the cattlesheds, then bring in water for the employers' houses, and then work on farms for the rest of the day. They would get home at around eight in the evening and usually go to sleep without dinner because there was nothing to eat. The reward for all this work would be a few meals and perhaps a set of clothes that they would then have to wear for all of the following year. Adults' lives were no easier.

When not working for the gentry, they would sometimes walk for hours to trade some of their vegetables and grain if they were lucky enough to produce anything. Payment would be in the form of some tea or other small food items or clothes. Many would also harvest grass from the plains and sell it as cattle fodder. Some would surreptitiously escape to the forests to forage and bring some food home for their children. If caught by rangers, there was a good chance that this food would be taken away since the forest was government property and removing anything from it without permission was not allowed. Others labored on the sugarcane plantations mentioned earlier.

According to an act passed in the mid 1960s, all scheduled tribe members were entitled to 5 acres of land. However, in order to prove that one belonged to a scheduled tribe, a birth certificate was required. Of course, it was impossible for most tribals to produce the required document and as a result, the act was meaningless. In fact, in many cases it worked entirely contrary to the way it was

supposed to and allowed the already landed and well off part of the populace to do even better. By duping tribals and getting them to sign documents that they had no way of comprehending, the aristocracy would get them to give up the bit of land apportioned to them. This land would subsequently be added to the already extensive estates and farms.

At around the same time, many parts of India, including most of Maharashtra, were in the throes of the green revolution. Convinced that the growing population and unfavorable weather patterns were going to cause a national food shortage, the central and state governments enacted several subsidies and other like-minded policies that promoted the growth of mechanized agriculture. This resulted in many smallholders, including many tribals, being dispossesed of their lands. Effectively, not only were tribals not able to own the land that they were so dependent upon, but they were also displaced from them.

These trying circumstances were brought on primarily because of the caste system and illiteracy. These factors combine to give rise to disadvantages such as poverty and lack of political power. Lokparyay's mission has been to alleviate the oppression in the area around Aurangabad by directly addressing these factors. For over 40 years now, Bapu and Mangaltai have been trying to get scheduled tribe members land ownership rights. They have employed various methods to help the adivasis out of their dire situation. The government (particularly the state government) and the higher castes profit from the cheap labor provided by tribals and are hence not too keen on seeing them acquire means of self-sustenance. As a result, many of Bapu and Mangaltai's efforts have required extensive legal and political wrangling. Fortunately, their education and prior experiences have equipped them well.

Bapu had already had experience campaigning for tribal people's rights in other parts of Maharashtra before arriving in Parala. Mangaltai, being a journalist who had covered similar issues and because of her involvement in many activist movements, had many useful connections and had acquired a working knowledge of the law. Together, they set about using the power of various already existing legal instruments to improve tribal lives. The first order of business was to procure birth certificates for tribe members. Due to the red tape and bureaucratic procedures involved, this process takes a long time. Many other wrenches were thrown into the works by the gentry and the state government as well and so it has taken much longer than it should have.

In 2011, after close to 40 years of repeated attempts, Lokparyay's efforts finally bore fruit. Around half of the Bhil population was granted birth certificates and the accompanying legal rights to own land. A critical part of this achievement was getting culturally different and sometimes adversarial people to work together. The caste system is very much present within the scheduled tribes as well and this gives rise to friction between the different tribes. Extant differences and animosity, whether perceived or real, prevent unity. Since they started working in this region, Lokparyay has been working hard to get minorities to see past their differences. All the successes that have been achieved so far have only been because of collective activism and action.

The other chief impediment in procuring rights to privately owned land was

the lack of education and awareness within the tribes. Many of Lokparyay's efforts have concentrated on raising awareness amongst tribe members of their rights as citizens of the country. Other efforts have focused on safeguarding them against those who make use of their inability to read or write. A few of their most recent efforts have ensured that education is a possibility for at least some of the children in this community. For more details on this, see subsection 1.2.4.

1.3.2 Conservation, preservation, and restoration

Lokparyay has undertaken many different projects in order to improve the lot of the Bhils and other tribal people besides helping them become land owners. Prominent among these are their efforts to safeguard the natural environment of this region. This is critically important for the tribals given how much they depend upon natural resources. Professor Madhav Gadgil has provided assistance with education, ideas, and ecological surveys in this enterprise.

Preservation, conservation, and restoration are all strategies that are employed depending upon the local environment. In Parala itself, because of extensive deforestation and stone mining, there is not much left to preserve. In the slightly more remote hills, parts of the old forest still remain. Preservation efforts here are aimed at ensuring that there is no logging for commercial purposes.

Conservation focuses on documenting traditional knowledge and use of the local flora and fauna and attempting to responsibly use these resources. This effort is spearheaded by Bapu (and one that I would like to be involved in). Professor Gadgil, guided by village doctors, has documented some of the medicinal plants that can be found here, what they are useful for, and how they are used. A recent project has attempted to study how the flowers of *palas* can be used to make natural colors that can be used instead of the synthetic ones more frequently encountered during the festival of *Holi*. Another project tries to promote the planting of native flora in and around tribal farms. Bapu has also undertaken surveys to study how land use differs between large industrial farms and the much smaller tribal ones.

These surveys are not complete yet, but the initial results seem to be in line with results from others parts of the world and the country. They show that mechanization of agriculture results in a decrease in the number of species, of both flora and fauna. Most tribal farms employ multi-cropping and usually have various species of native trees, herbs, and vines growing in and around them. The industrial farms are large monocultures with a few popular species of trees around the edges. I am not aware of any analyses yet of how the two types of farms compare with native forests. That might very well be an opportunity for future studies, although the scales at which the two operate might make such an analysis difficult.

The largest restoration project in this area is the Biodiversity Park adjacent to the hostel in Parala (mentioned in section 1.1). This park was started with 1000 donated saplings from a nursery in Pune in 2013. Since the area has been

witnessing a drought for the last few years, much of the water to nourish the plants initially had to be brought in from far away sources. Lokparyay had employed a few local youths to help take care of the park. These young men worked hard to keep the plants alive and today the park is flourishing. Many more trees and shrubs have now taken root in the park. Locally recognized forest vegetables, vines, and herbs have begun to re-appear as well. The boundaries of the park have expanded as opportunistic grasses and plants colonize the edges. The park still has to be watered and maintained because of the continued lack of rain, but it does seem like it is serving as a nucleus for the expansion of forested land. For some details on the recovery of fauna within the park, refer to section 1.1.

Chapter 2

Changes

The Bhils have witnessed the rise and fall of numerous cultures and a few illustrious civilizations over the many centuries of their existence (subsection 1.2.6 in the previous chapter provides a very brief history of the Bhil people). Some experiences with other cultures have been affable, while others have been markedly hostile. Bhil traditions have likely changed repeatedly in response to these encounters (probably more in response to the hostile ones).

Their most recent major run-in has been with a culture founded on capitalism and individual rights. Exposure to this culture probably began in the British colonial era with the privatization of the forests that used to be their homes. Exposure has continued post independence as free India has continued along a path of development that it was introduced to by the British. This path is decidedly anti-rural and has forced the Bhils to adapt by changing many aspects of their lives. This chapter deals with what I think some of these changes are. Similar trends are being observed all over India but to my knowledge, little has been done to understand the social and economic factors driving them. Therefore, in this chapter I will also attempt to identify the forces that I think are important. Although people's diets in Parala have not changed much, other aspects of their lives, some closely related to diets, have. Diets seem to be a part of a cultural package, some components of which are more vulnerable to change than others.

2.1 Agriculture

Bhils in the Aurangabad region today eat much the same food that their parents, grandparents, and great grandparents used to. They might try city food on their occasional visits to the neighboring towns or at the weekly market at Loni, but their daily meals are still made up of vegetables foraged from the forest and the products from their farms and domestic animals. However, although the species of crops planted and harvested on the farms are much the same as the ones that have been traditionally cultivated, the cultivars of the crops have changed.

In the early 1960s, hybrid varieties of wheat and rice were introduced to India, purportedly to avoid the widespread food shortage that was bound to otherwise occur. These varieties had performed well in Mexico and the U.S., which at the time was one of the largest exporters of wheat. With some tweaking, introduced varieties took off in a big way in India as well. The new crops had significantly higher yields and the surplus production ensured a viable source of income for farmers. Supposedly, with the help of large quantities of wheat imported from the U.S., these varieties saved India from a devastating famine while also ensuring a comfortable livelihood for farmers. The green revolution was widely touted as an unmitigated success. Very soon, new varieties of millets were developed as well.

As is probably apparent from the previous chapters (section 1.3 in particular), the Bhils did not profit from the beneficence of the green revolution. Many have argued that India's food problems do not arise from a lack of food, but from the lack of purchasing power resulting from social and economic inequity. This certainly seems to have been true for the Bhils. If anything, the green revolution only exacerbated problems that had arisen because of the privatization of land.

Establishment of forest reserves displaced many Bhils. Further rules restricting the harvesting and use of forest products (including non-timber products) forced them to start looking elsewhere for sustenance. Their position low down on the totem pole of society, abetted by their lack of knowledge of how the new world worked, left them unable to attain land rights. It also left them unsuited for anything but labor jobs. Many of the growing and quickly industrializing new farms needed cheap labor, as did the sugarcane plantations in Gujarat and other parts of Maharashtra. Desperately requiring some way to feed and clothe themselves, they had no recourse but to turn to labor and servitude.

Even today, despite Lokparyay's efforts, the situation is dire for many of the Bhils. Some still have to work on the sugarcane plantations either because they have no land or because they have no access to water for their crops. Others work on the bigger farms in the area and on the pomegranate plantations that have recently come up. The situation is significantly better for those that have land rights and access to water, but even they constantly face economic pressures that they cannot escape. (Side note: as laborers on the larger farms, their working conditions are far better than they used to be. This is because the Bhils that do own land and have access to water from the Manyad dam do not depend so heavily on manual labor based jobs now. As the number of tribals with land rights increases, the gentry have been forced to increase wages in order to attract the required amount of labor.)

Due to the history of oppression that they have been subjected to and the injustices that often still befall them, all the Bhils that I talked to have come to believe that they need to keep up with the more affluent parts of society. The alternative is the extirpation of their culture and a poverty ridden, miserable existence. Since exclusion from the market economy is not a possibility today, they have had to find ways to earn money and stay relevant.

One of the means through which they achieve this is by growing more cash

crops such as cotton. The surplus from their food crops also serves as an important source of income. Since the amount of income is directly proportional to the amount of surplus generated, most of them choose to cultivate high yielding hybrid varieties.

High yielding varieties however, are only high yielding under very specific conditions. Higher yields come at the cost of lower drought and pest resistance and higher fertilization requirements. Farmers are thus forced to invest in pesticides and fertilizers, something which they never needed to do when they could depend on the plants' inherent defenses against pests and on manure from their cows for fertilization. The increased dependence on water and the lack of rain also means that the benefits are reaped only by those who have access to irrigation from the Manyad dam.

Additionally, farmers also have to purchase seeds every year since seeds harvested from the hybrid crops are not viable. Often, the money spent on seeds and external inputs outweighs the income from surplus production; which results in the Bhils having to take out loans that are difficult to pay off in the face of sustained drought.

On top of all of this, none of the people I talked to are very happy with the new crop varieties. They say that the older varieties not only tasted better, but they also stayed fresh longer after harvesting. They claim that people used to be healthier on the old produce even though they had less of it. Even though many of them wish that they were still cultivating the original native varieties, economic realities have forced their hands.

The health claims tie in to larger agricultural changes that are occurring concurrently. Although farms in India are not as big and have not been mechanized to the same extent as in the US, there does seem to be a trend in this direction. Big farms in India are only about 120 acres or less, and are probably even smaller in the Parala region (need to find out what the figures are). In many parts of the country, they have been buying up and replacing smaller farms (mostly in the 10 - 30 acre range; farms smaller than that can be managed by a family and the larger ones can invest in machines and infrastructure).

In Parala as well, the big farms have been getting bigger and have been investing more heavily in machinery and in external inputs. However, spraying of pesticides, cotton picking, and fertilizer application is still done by hand or with the help of simple, manually operated machines. Hired laborers, which include the people that I talked to, do all of this work and are resultantly exposed to the various chemicals used. I do not yet know what synthesized chemicals are used and whether they have been proven to be harmful to human health, but my interviewees firmly believe that the number of health complaints among the laborers has increased. Women are employed for picking cotton and they spend long hours in the fields handling pesticide treated plants. They often have their children with them and it seems as though women's and children's health has deteriorated more than that of the tribal men.

The big farms almost exclusively grow only those crops that can be cultivated in high densities as monocultures or that can generate high returns. Thus legumes are excluded from these farms and only cotton and cereals such as

corn, wheat, and millets are grown. Aggressive weeding ensures that no other plants can survive on these farms.

This is a far cry from the tribal farms where multiple food crops are cultivated, often in alternating rows or mixed in with each other. Cereals are mostly grown as monocultures, but shade tolerant legumes such as *harbhare* can be and often are mixed in. Weeds are also allowed to grow if they are recognized to be edible or medicinal plants. These traditions are being slowly eroded by the incursion of hybrid cereal varieties, but will likely be kept alive by the Bhils' heavy dependence on legumes and beans in their diets.

Surveys undertaken by Bapu show that not only is there a greater variety of cultivated plants in the Bhils' plots, but that the diversity and abundance of wild plants is higher in these plots as well. The larger farms have a few well known tree species growing along the edges and almost no vines and herbs, while the corresponding numbers for the Bhil farms are often an order of magnitude higher. If patterns of land use change seen elsewhere in India (larger farms replacing small ones) were to occur here (quite likely; more on this in the next section), biodiversity, at least in terms of species diversity, will suffer.

There is a somewhat related change that is occurring in urban India that is counter-acting these pressures to move towards hybrid crops and bigger, more mechanized farms. The economic upper and middle classes of India are becoming more conscious of what they eat. There is now a greater demand for native (*gavran*) food varieties. Food that is perceived to be rural is even considered fashionable in some circles. The rustic *bhakri* made of millets is becoming increasingly popular. Lokparyay is using these social movements to create a market for native food varieties in Parala. They hope that this could stem the proliferation of seemingly unsustainable and probably less healthy crop varieties and farming methods while also providing the tribal people with a means of livelihood that supports their traditions. It might be that these movements are only transient. Even if they are not, they might not percolate to other parts of society. If changes in food consumption patterns, determined in large part by business interests, remain restricted to a small part of society, it seems highly unlikely that they could alter agricultural land use patterns.

2.2 Material, educational, and other changes

There are other changes that are taking place here as well that I see as a response to economic and social pressures. Many of these are ones that are occurring throughout India.

One instance of such a change is an increasing consumer mentality. People all over India seem to want more and better things, regardless of the utility that they derive from them. Phones, vehicles, household goods, all seem to be in constant need of upgrades and replacements. This seems to have become true in Parala as well. Mobile phones, as in the rest of India, have become nearly ubiquitous. They have also become almost essential for functioning in the Indian economy and society. However, like many other Indians, a number of the Bhils have multiple phones which they replace frequently. The Thakars are apparently the early innovators who bring in new technology and customs to the village, but the Bhils adopt novelties quickly.

Once the basic needs of land and a reliable source of water are met, increasing amounts of money are spent on convenience and ostentation. This is not evident among older generations, but the newer generations are quick to invest in trending phones, motorcycles, clothes, skin whitening solutions and the like. There are of course technological innovations such as tractors or electricity that incontrovertibly make life easier for the Bhils, but the same cannot be said for constant upgrades that seem to deliver only marginal benefits.

The primary reason for this development seems to be the desire to keep up with the neighbors. As one of my interviewees explained it to me, once a person sees a peer dressing up and being noticed (positively) for doing so, he does not want to be seen as slovenly or backward. He is tempted to follow suit and if finances permit, he will. It appears that improved financial circumstances have been necessary to initate this change, but that social perceptions are necessary to propagate it. In an environment of increased exposure to media, advertising and marketing strongly influence what is considered fashionable or even necessary.

I do not know whether the perceived need for keeping up with neighbors itself is a new development or whether this is a universal human trait. It is hard to imagine a society in which individuals are not constantly comparing themselves or others to their peers and social referents, but it is also very hard for me to imagine how this trait would play out in a forest dwelling society that has limited access to material goods. Membership to any group seems to impose certain standards that need to be adhered to. These standards themselves might change as conditions change, but there might well be simple rules to explain what these standards are and how they change in response to changing environments. For instance, assuming that the social norm of keeping up with one's peers is universal, one could posit that changing environments do not change this norm, but that they alter the metric used for comparison. In a hunter-gatherer society, skill at tracking and bringing down large prey might be the salient metric instead of the quantity and quality of material goods in one's posession in a more capitalistic society.

As the number of people that the Bhils are forced to interact with increases,

they have also had to learn to communicate with them. While most Bhils today still speak the Bhil language, many of them can also speak Marathi fluently. Local schools only teach in Marathi; so growing literacy promotes this trend.

Another consequence of growing literacy could well be emigration to cities. Very few of the Parala Bhils have thought about moving to cities, mostly because they lack the education required to obtain jobs there. Even those who have tried living in places like Mumbai have had to return eventually because they have found it impossible to find housing and adequate means to support their families there. With Bhil children increasingly able to avail of better education at well funded boarding schools, that will most probably change. It seems highly unlikely that after realizing the possibility of drastic economic advancement unlocked by education at reputed schools, children would want to revert to farming or that their parents would want them to do so.

This mode of urbanization would be different from the more common model whereby dispossessed and destitute villagers are forced to move to cities in search of means to sustain themselves. In the latter case, immigrants inevitably end up in slums and struggle to make ends meet. The educated Bhil would probably be much better off.

In terms of land use as well, the effects could turn out to be very different. The emigration of villagers in desperate need of better economic opportunities is usually accompanied by land abandonment. While land abandonment should give rise to the possibility of land consolidation in order to make farms bigger, this does not seem to play out. I do not know why this is the case, but one of the reasons could be that emigration results in a smaller labor force. This might make agricultural expansion unattractive given that farming in India is still very labor intensive.

Another reason could be that the land itself is unattractive. Land is often abandoned because of decreasing soil fertility/health and correspondingly decreasing yields. Also, investing in agriculture might currently be risky given the widespread droughts all over India. There does not seem to be any consensus on the effects of land abandonment, but there is little evidence to suggest that it can revert to a pre-agricultural vegetated state on human relevant time scales. Desertification is a major concern that, in the face of precipitously falling water tables and increasingly arid conditions, seems to be well founded. From a conservation perspective, in the absence of rigorous active restoration plans, keeping land under production might in many cases be better than abandonment.

For economically upwardly mobile Bhils in Parala, educated children emigrating to cities could facilitate the retention of agricultural land; at least for a short time. Older generations, with strong cultural and emotional attachments to the land, particularly now that they have land deeds, are unlikely to move away. Remittances from their children could in fact help them to continue their way of life while improving their living standards.

It is difficult to tell what might happen on a longer time scale. Once land passes on to the children that will be living in cities, there will be little incentive to maintain and cultivate it. Attachments will probably wane as generations pass and the land might get appropriated for different uses (this is of course

assuming that future generations will also have strong incentives to continue living in cities. Climate driven socio-economic changes could conceivably restructure incentives entirely). This is unlikely to happen soon because only a very small fraction of the Bhil children have good educational opportunities today, but it is worth thinking about. There might well be opportunities here for re-greening the land, something that the Biodiversity Park in Parala has shown to be possible.

Chapter 3

Summary and Plans for Future Investigations

India today is in the middle of a wave of changes. Many of these changes are ones that seem to inevitably accompany economic development. The mass exodus of people from rural areas to cities, the rapid expansion of cities to accomodate growing populations, the homogenization of diverse peoples resulting from incorporation into a large, connected economy, changing patterns of land use, the increasing presence of industrially produced food in diets, and decreasing biodiversity are phenomena that almost all first world countries have experienced in their respective pasts.

These transitions interact with each other in ways that we do not understand well. In the past two decades, a fair amount of attention has been dedicated to questions of food security and on the environmental impacts of increasing demand for animal products in developing countries. However, greater consumption of livestock is part of a larger suite of dietary changes. In India, for example, wheat has come to replace millets in many households and has also replaced millets and pulses in many farms. In the North-Eastern states, potatoes have begun displacing other tubers such as yams and tapioca. Estimating the effects of such changes is difficult, in large part because of the paucity of data.

Moreover, while much of the research portrays effects as stemming from consumer choices (higher incomes = higher demand for animal products), it is not at all obvious to me that the story is so straightforward. Dietary changes usually seem to be well aligned with the profit maximizing food industry's interests. It might very well be the case that the food industry, in its capacity as a conduit between consumers and producers, influences both diets as well as land use. There is evidence showing the disproportional power of the food lobby in determining not just policy relevant to itself, but even national nutritional guidelines. There is little doubt that through a combination of advertising and aggressive lobbying, industry is able to significantly shape people's perceptions of food. Further, since food consumption is often a very visible behavior that

can be used as a status symbol or for signaling, it is difficult to imagine dietary shifts as being independent of social forces.

While there is extensive research on determinants of individual food choice, there has been little insight into what causes large groups of people to change their diets. There is even less research causally linking changes in diet to changes in land use and thence to trends in species population. In order to begin addressing these gaps in our knowledge, I plan to undertake projects in India as well as in the US.

There are two primary aims for my research in India. The first is to identify agricultural land use changes that are occurring in parts of rural Maharashtra and to try to figure out why these changes are underway. The second is to begin documenting the effects of these changes on biodiversity. I will focus on plant and bird species (because those are the ones that I have a bit of a handle on). There is currently very little of such data available and I think it is vitally important to begin recording this information.

My time in Parala was a preliminary attempt at beginning this work. I had initially gone in thinking that I would be investigating dietary changes, but once I started talking to people there, I realized that since diets have remained unchanged for the most part, studying land use change would be more prudent. Moreover, other changes that are occurring might be precursors of changes in diets (see section 2.2 for these other changes). Many past Indian leaders have thought of rural India as a microcosm in which all the dynamics of the Indian macrocosm play out; so uncovering the reasons underlying changes here could illuminate causes of larger scale changes as well.

What I have seen so far in Parala is a long history of class and caste warfare, severe oppression of novices to the capitalist economy, and very rapidly changing biotic and abiotic features. I do not fully know why the trends I have observed (see Chapter 2 for details on these changes) are occurring, but oppression by the upper classes seems to have forced the Bhils to adapt. Exposure to the market economy and the proliferation of media has also altered their expectations, aspirations, and perceptions. Improving economic conditions (for some of them) are allowing them to pursue these new aspirations.

The climate has been unfavorable for agriculture for about a decade now, although irrigation improvements are allowing farmers to hold on. Land cover has changed considerably. The once dense forest is now mostly gone with just a few broken remnants managing to survive in the more remote hills. Many large farms and plantations practicing mono-cropping have come up. The shifting agricultural style of the Bhils has disappeared, but recent developments have provided them with land deeds that enable them to sustain themselves. The Bhil farms, though small (< 10 acres), are far more diverse than the bigger ones. They also use fewer synthetic inputs although this is also beginning to change because of the adoption of hybrid crop varieties.

Bapu has done some work documenting species on sustenance providing tribal farms as well as on larger, more business oriented farms. I am hoping to contribute to this work in December and to learn more about differences in biodiversity across the different kinds of land use. I am also planning on

advancing this research by working with NGOs serving tribal populations in other parts of Maharashtra.

This research is probably not going to allow me to make any causal inferences about the relationship between diets and biodiversity. For this, I am going to rely on American history. One of the ways in which Americans' diets seem to have changed today is the large amount of farmed meat consumed. Until at least the early 1900s, game animals composed a more significant part of people's diets (according to Joel Greenberg, author of a few books on the natural history of the midwestern United States). The history of the game market might shed some light on this. Menus from Princeton's dining halls going back 100 years or so (available in the Mudd library) might also help me in identifying shifts in dietary trends. The FDA might also have some information on diets.

For changes in land use and for species' population trends, I am primarily going to focus on parts of the Illinois region. Illinois has witnessed a lot of change since the latter half of the nineteenth century. The invention of the self scouring steel plow promoted the establishment of monocultures of corn. By around 1900, most of the grassland in the region had been replaced by corn fields. More recently, soy has also gained a significant foothold. These and other changes could be gleaned from farming journals like the Illinois prairie farmer. Satellite imagery might also prove useful, but its utility might be limited if differentiating between corn and grass is technically difficult.

The Illinois Natural History Survey might be able to furnish some information on changes in species trends. An article I came across recently (Illinois Birds: A Century of Change) reports the results of bird surveys separated by 100 years. Currently active land retirement programs would also help in providing data for this study.

Discerning the interaction between diets and biodiversity will likely be difficult even if the individual trends are well documented. I think modelling will prove to be a critical part of this part of the project. Even for my investigations in India, using models to predict how different factors shape changes in land use (see section 2.2 for more explanation) could prove to be insightful.

Using American history to predict likely changes in India will of course be problematic. There are many differences between the two countries. They have very different histories, geographies, and societies. However, it might not be very far fetched to make some tentative remarks about how biodiversity in India might be affected by current diet trends on the basis of US history. While the two countries are different, the economic and social factors at play in these changes are similar. Many of the changes that India is experiencing today are ones that the US has already seen in the recent past. If there are lessons that can be learned from American history, it would be remiss to ignore them.

All in all, I think I have a better handle on the various projects that my thesis is going to entail than I did a few months ago. The next month is going to be important for setting up investigations in India that I will work on next summer. The upcoming semester is going to be dedicated to the US history part of my thesis. If everything goes according to plan, I should have an interesting story to tell in a couple of years time.