

# INNOVATIONS IN DEVELOPMENT

**IMPROVING HEALTH SERVICES FOR TRIBAL POPULATIONS** KARNATAKA, RAJASTHAN, TAMIL NADU



# **Overview**



# IMPROVING HEALTH SERVICES FOR TRIBAL POPULATIONS

### Improving Tribal Populations' Access to Health Services

India's poor tribal people have far worse health indicators than the general population. Most tribal people live in remote rural hamlets in hilly, forested or desert areas where illiteracy, trying physical environments, malnutrition, inadequate access to potable water, and lack of personal hygiene and sanitation make them more vulnerable to disease.

This is compounded by the lack of awareness among these populations about the measures needed to protect their health, their distance from medical facilities, the lack of all-weather roads and affordable transportation, insensitive and discriminatory behaviour by staff at medical facilities, financial constraints and so on. Government programs to raise their health awareness and improve their accessibility to primary health care have not had the desired impact. Not surprisingly, tribal people suffer illnesses of greater severity and duration, with women and children being the most vulnerable. The starkest marker of tribal deprivation is child mortality, with under-five mortality rates among rural tribal children remaining startlingly high, at about 100 deaths per 1,000 live births in 2005 compared with 82 among all children.

Three World Bank-supported State Health Systems Projects - in Rajasthan, Karnataka, and Tamil Nadu adopted a number of innovative strategies to improve the health of tribal groups. Given the wide diversity among these groups and their various levels of socioeconomic development, the interventions adopted were multipronged and area-specific. Almost all these initiatives were provided through public-private partnerships (PPP).

The popularity of these initiatives and their impact on the health of tribal populations has prompted all three states to expand most of these endeavours in a phased manner. While gaps still remain - such as the lack of credible private health care providers, budget constraints, the need for better oversight mechanisms, and improved capacity for the effective management of PPP contracts - there is considerable scope to expand these initiatives for the benefit of tribal populations in regions that continue to be underserved.

## Context

ver 84 million of India's people belong to Scheduled Tribes. While tribal populations make up only 8 percent of India's population, they account for over a quarter of the country's poorest people. Although these groups have seen considerable progress over the years—poverty among tribal groups declined by more than a third between 1983 and 2005 - nearly half the country's Scheduled Tribe population remains in poverty, due to their low starting point.

Rajasthan has the largest population of Scheduled Tribes in the country, constituting over 12 percent of the state's population. They are concentrated in the southern tribal and western desert regions of the state. Young tribal girls enter the reproductive age as victims of undernourishment and anemia, and face greater health risks as a result of early marriage, frequent pregnancies, unsafe deliveries, and sexually transmitted diseases. Women's low social status makes them more likely to seek treatment only when the ailment is well advanced. Societal attitudes towards pregnancy, which is generally not considered a condition that requires medical treatment, nourishment or care, hinder efforts to deliver antenatal services.

Tamil Nadu is second to Kerala in terms of human development indicators. Scheduled Tribes make up just I percent of the population, with most living in the forests of the Nilgiri Hills and the Eastern and Western Ghats. While many of the state's tribal women enjoy almost equal status with men - reflected in their balanced sex ratios - the Infant Mortality Rate, Maternal Mortality Rate, Neo-Natal Mortality Rate and Under-5 Mortality Rate for tribals have not improved to the same extent as those for the general population. Certain tribal groups also suffer a high incidence of sickle cell anemia.

In Karnataka, scheduled tribes constitute 6 percent of the population. Malaria, pneumonia, respiratory disorders, snake and scorpion bites, diarrhea and fever are commonly reported ailments. Tribal people have lower levels of antenatal care, fewer institutional deliveries, lower levels of immunization, and higher prevalence of reproductive tract and sexually transmitted infections. While Government of India norms for the provision of health care facilities were found to have been met, accessibility continued to be poor.

#### Differentials in health status in Rajasthan, Karnataka and Tamil Nadu

NFHS-3

	Infant mortality/1000			Under 5 mortality/1000			% of children 6-59 months classified as having any anemia		
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Scheduled Castes (SCs)	96.4	57.2	37.4	123.1	65.4	48.3	69.9	75.0	70.7
Scheduled Tribes (STs)	73.2	45.8	*	113.8	77.9	*	73.7	80.6	*
Other disadvantaged	66.9	53.0	11.5	80.8	63.8	44.6	69.0	69.2	61.4
Others	58.1	43.5	*	69.9	60.4	*	67.6	64.4	68.4

<sup>\*</sup>not provided as based on fewer than 250 unweighted cases

## Challenges

#### Lack of awareness of health issues

Without awareness of health issues, most tribal populations tend to fall ill more frequently and wait too long before seeking medical help, or are referred too late by untrained village practitioners. In the past, most health awareness campaigns, which need significant investments over long periods of time for noticeable impact, were planned by the medical community instead of by communications experts. The form and content of health messages was not pre-tested to ensure proper comprehension and absorption by target groups. Moreover, the campaigns' meager effect was easily nullified by the tribal population's poor experience with health workers.

#### Lack of health facilities in remote rural areas

Past efforts to bring health care to the poor through outreach camps and mobile health units have not had the desired impact. Coverage of remote tribal areas was found to be poor, a large number of positions lay vacant, the availability of drugs was inadequate, and vehicles frequently broke down because of poor maintenance. Even where brick-and mortar health facilities were set up, they were often insufficiently equipped with drugs and medical supplies and faced a shortage of trained doctors, nurses and paramedical staff.

#### Lack of emergency transportation

Typically, pregnant women or sick persons from remote tribal hamlets are unable to make it to health facilities in time for institutional deliveries or emergency medical care for want of easily available and affordable transportation

## Discriminatory behavior by health care providers

There are deep-rooted cultural chasms between tribal groups and the largely nontribal health care providers, resulting in insensitive, dismissive and discriminatory behavior on the part of health care personnel. In addition, many tribal populations face language barriers while accessing health care since their dialects are not easily understood, even by urban populations of the same state. Tribal people are frequently exploited for informal payments and are often referred to private chemists or medical practitioners with mal-intent. This is one of the main reasons why disadvantaged groups prefer to self-medicate or visit traditional healers rather than public or private health facilities.

#### Financial constraints

As most rural tribal populations live below the poverty line, the lack of funds influences how much and what type of health care they receive, and determines whether households are able to maintain their living standards when one of their members falls ill. Poor tribal people often have to borrow money, mortgage land or animals, or pawn jewelry to meet medical expenses, or else let the sick person die. They also cannot sustain the opportunity cost of a doctor's visit, much less of a protracted hospital stay, often dropping out half-way through a course of treatment as it means leaving their crops, animals, and family unattended.

## **Innovations**

o improve tribal populations' access to health care and raise the quality of service provided, the three World Bank supported state health projects in Rajasthan, Karnataka, and Tamil Nadu adopted a number of innovative strategies:

## I.Raising Awareness of Health Issues

Raising awareness of health issues is the first step towards improving health outcomes. However, while public health programs have frequently conducted Information, Education and Communication (IEC) campaigns - such as stressing the importance of hand washing, regular ante-natal check ups, institutional deliveries, immunization etc. They have had little impact. All three projects, therefore, sought to markedly improve the content and quality of health messages and

Tribal mobile outreach medical van at Ambalamoola, Nilgiris District, Tamil Nadu



target them at specific tribal groups through the means appropriate to each. All the messages were professionally crafted and pre-tested for maximum impact.

#### Rajasthan

In Rajasthan, health messages were most commonly disseminated using live performances by drummers, dancers, folk musicians, magicians, puppeteers etc. to appeal to tribal populations. The state is also piloting the use of incentives for Accredited Social Health Activists (ASHA), recruited through the National Rural Health Mission (NRHM) for this purpose. A roster of activities is planned for each ASHA. Once the ASHA has successfully completed these activities, incentives are released to her. The pilot is being independently evaluated and will be scaled up with necessary adjustments under the National Rural Health Mission (NRHM) if appreciable improvements in outcomes are observed.

Magic show in medical outreach camp, Udaipur district, Rajasthan



# IMPROVING HEALTH SERVICES FOR TRIBAL POPULATIONS







Jinjiyali outreach camp, Jaisalmer district, Rajasthan

#### Tamil Nadu

In addition to posters, hoardings, busboards, and personalized letters of communication for the literate members of a family, radio jingles and video broadcasts featuring popular film stars were found to be effective means for disseminating health messages to the state's tribal people. The state invested significant resources to develop impactful messages by pre-testing comprehension, acceptability and impact among target communities. An apex team of health communicators was also contracted to disseminate key health messages through sustained interaction with schools, workplaces and the community.

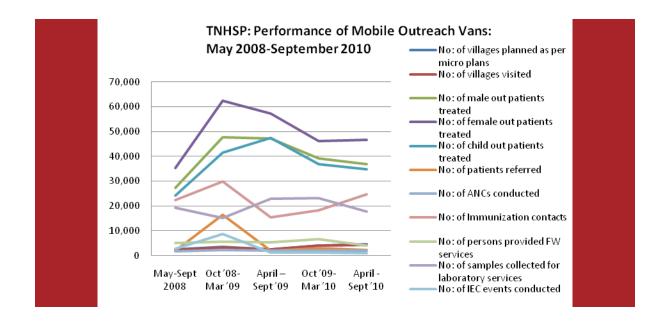
# 2. Bringing Health Services to Remote Populations

While medical camps have often been conducted in the past, stakeholder consultations expressed an overwhelming need for mobile medical camps to reach remote tribal populations. All three projects therefore sought to improve outreach, through statesponsored medical camps in Rajasthan, and through NGO-run mobile health clinics in Tamil Nadu and Karnataka.

Outsourcing of these services to NGOs and medical colleges may prove to be an efficient option, but requires strong monitoring and evaluation systems. The success of mobile clinics depends on effective management of medical personnel, as well as on the availability of drugs, diagnostic facilities and vehicles so that the delivery of services remains assured and consistent. The lack of any one input seriously compromises the efficiency and effectiveness of health care delivery.

#### Rajasthan

Medical outreach camps: In Rajasthan, the project brought medical outreach camps to nine desert and tribal districts where brick-and-mortar health facilities were dysfunctional. Six outreach camps were conducted every month in each district. Each camp

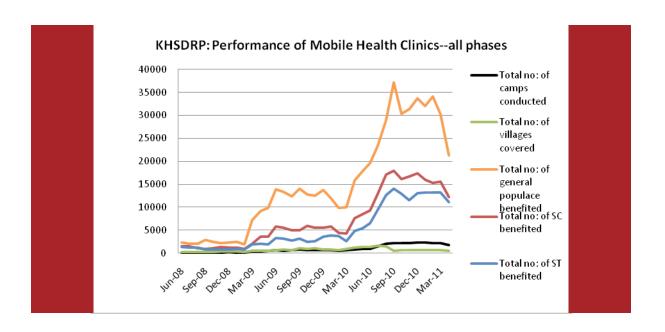


was followed by two smaller camps to dispense lab reports and medicines and provide followup care. Populations were drawn to these camps through door-to-door canvassing by Accredited Social Health Activists (ASHA) and Auxiliary Nurse Midwives (ANM), as well as loudspeaker announcements, banners and pamphlets. The range of free medical services provided was widened to include pediatric, gynecological, and general medical services, in addition to free immunization, basic lab tests, free medicines for a full course of treatment, and referral of the more complex cases to advanced facilities. Doctors were brought in on a rotational basis from satellite hospitals that had lighter patient loads as well as from higher health facilities to ensure that no facility was left unattended for long. With the number of beneficiaries at each camp ranging from 500 to 4000, outreach camps have proved to be extremely popular and the uptake of services by underserved populations has been consistently encouraging.

The number of camps increased from 15 camps catering to some 9400 tribal beneficiaries over a six-month period in 2006 to 433 camps catering to some 45,000 tribal people over a similar period in 2008.

#### Tamil Nadu and Karnataka

Mobile health clinics: In Tamil Nadu and Karnataka, the projects introduced mobile health clinics to bring basic health services to tribal populations in underserved parts of the state, and contracted NGOs to run them. Each mobile health clinic consisted of a large vehicle staffed with a qualified doctor, two ANM/nursing staff, a pharmacist, a lab technician and a male and female support staff. The vehicle was equipped with an oxygen cylinder, IV lifelines, emergency drugs and plenty of information materials. Medical staff treated common illnesses and provided first aid and maternal and child care services, as well as family planning services. They also helped raise



awareness of health issues and collected data on the disease profile of tribal populations. The Mobile Health Clinics have proved to be very popular, especially for women and children's illnesses. In Tamil Nadu, some 17,000 villages were serviced by tribal outreach vans between May 2008 and September 2010, with medical benefits accruing to over 630,900 beneficiaries. In Karnataka, over 250,000 tribal patients availed of the services of mobile outreach vans between June 2008 and May 2011.

# 3. Providing Emergency Transportation for Expectant Mothers

All three states of Tamil Nadu, Karnataka and Rajasthan have used Public-Private Partnerships (PPPs) to provide emergency transportation to take pregnant tribal women to health facilities for obstetric care. While not all hamlets have access to tarred roads, the emergency ambulance services reach the nearest motorable point to pick up patients in all three states.

## Tamil Nadu-Ambulances for pregnant women

With the project paying for 385 well equipped, state-of-the-art ambulances, free emergency transportation is now available to take pregnant tribal women to primary and higher health centers. Lessons learnt from the poor management of multiple NGOs contracts for ambulance services led the state government to revise its strategy and contract a single professional agency to provide free emergency transportation services in health, fire, and police emergencies across the state. An additional 200 ambulances are being supported by the project to effectively address the increasing demand and case loads. To encourage institutional deliveries amongst tribal groups, another scheme provides full boarding

and lodging facilities at PHCs in tribal regions for the mother and a maximum of two attendants for 10 days at a cost of Rs.100 per day. The scheme has proved promising and has been expanded by the Department of Medical Services to over 15 PHCs that cater to remote tribal populations. NRHM too has expressed interest in the scheme and has set aside a budget to expand it to 43 PHCs in the neediest tribal areas.

# 4. Employing Health Workers from Tribal Communities

As tribal populations find it difficult to navigate through the complexities of medical facilities, all three health projects have made provisions to help them. In partnership with local NGOs, counselors who are often from tribal communities themselves have been placed at district hospitals to

guide patients, explain doctors' prescriptions, help patients take advantage of welfare schemes, and counsel them on preventive and promotive health behaviors.

#### Rajasthan

Patient counselors: Initially patient counselors were placed at all facilities which had 100 beds or more, in partnership with local NGOs. As these counselors proved quite popular, qualified counselors were directly recruited and placed at all facilities with 50 beds or more.

#### Tamil Nadu

**Tribal counselors:** NGOs were contracted to train and place counselors from tribal populations in government hospitals and PHCs in 12 tribal districts. These counselors also pay weekly visits to tribal hamlets to raise awareness about health issues and promote healthy behaviors. Attendance





Tribal Women in Tamil Nadu



by tribal groups has increased at health facilities. The project is now expanding this service to other tribal districts.

#### Karnataka

Increasing local expertise through tribal ANMs: For the first time in Karnataka, tribal ANMs were recruited and trained to bring health care closer to tribal settlements. In every batch of ANM trainees, ten seats were reserved in each district for tribal girls who have passed Class 10 and are willing to work in tribal settlements where no ANMs are posted and where accessibility to health services is poor.

#### Karnataka

Citizens Help Desks: Citizens Help Desks have been established to provide round-the-clock assistance to tribal and other vulnerable groups in selected district and taluk level hospitals. These help desks also address complaints by mediating between

consumers and service providers. Nineteen of these desks are supported through the World Bankfinanced project, with NRHM expressing interest in expanding these services to other health facilities in the state.

## 5. Changing the Behavior of Health Care Providers

To help personnel at medical facilities change their insensitive and discriminatory behavior towards poor and disadvantaged groups, including tribal populations, the Tamil Nadu and Rajasthan health projects supported behavior change communications campaigns amongst the clinical, paramedical, and lower staff, as well as mechanisms to obtain feedback.

#### Rajasthan

A human resource development agency was recruited to conduct a behavior change communications





Tribal Women in Karnataka



campaign in medical facilities in six districts. The campaign sought to instill patient-friendly behavior among health care providers and helped them develop team spirit and pride in their work. The agency also worked with the district authorities to sustain this attitudinal change through repeated contacts with health care personnel. Pre-and post-training evaluations as well as independent surveys indicate that the training was greatly valued by lower-level staff who have the most contact with patients and that it has indeed improved their attitudes and behavior patterns towards tribal patients.

Rajasthan

Consumer feedback and complaint redressal pilot: A consumer feedback and complaint redressal initiative is being piloted that logs patient feedback and complaints through both anonymous

and open channels. Action taken on complaints is publicly disclosed for greater awareness. The pilot is due for evaluation and may be scaled up if found effective.

#### Tamil Nadu

The same human resource development agency employed in Rajasthan chose to adopt a Training of Trainers model in Tamil Nadu and built substantial capacity within the state's health department to hold heterogenous and homogenous group trainings in behavior change communication. The objective of inculcating team spirit, pride in work and client friendliness was central to these workshops. This method ensured these skills remained available with the state long after the agency completed its assignment, making it possible to conduct refresher courses at no additional cost to the state.

Mother and child, Rajasthan



Community meeting at Manpura Village, Chittorgarh district, Rajasthan



### 6. Providing Financial Support

While most innovations have included the provision of free medical services to poor tribal populations, a few pilots have sought to ease the financial burden of inpatient care on these groups:

#### Tamil Nadu

Bed grant scheme: Lack of reliable public health care services in certain underserved tribal areas prompted the project to partner with NGOs for the provision of free inpatient care to tribal populations. All costs pertaining to minor ailments and surgeries are reimbursed by the project. The scheme has been well received by tribal populations and uptake has improved. For instance, the number of inpatients at the hospital facility run by the Nilgiris Wynaad Tribal Welfare Society increased from 7 per month to 47 per month over the two-and-a-half-year period between 2008 and 2010.







Tribal women in Tamil Nadu

#### Tamil Nadu

Mortuary van services: As poor people were being fleeced by private mortuary van operators, the project procured forty two mortuary vans and contracted an equal number of NGOs to run them at pre-defined competitive rates. The vans were stationed at the larger public facilities. They were also promoted actively by counselors stationed at facilities. The project is now moving towards a comprehensive mortuary van service with the International Red Cross Society, to be supported by a centralized call center facility, a unique toll free number, and trained staff.

#### 7. Other Innovations

#### Tamil Nadu

**Sickle cell anemia pilot:** Given the high incidence of sickle cell anemia among the state's tribal populations, the project, in partnership with two local NGOs, initiated a free screening and treatment program. A large number of tribals were screened for the genetic condition, and those at risk were provided with prophylaxis, medication, blood transfusions, inpatient treatment and counselling.

## **Impacts**



Mobile Health Clinic in action in Karnataka

aken together, these activities in Rajasthan, Karnataka and Tamil Nadu have significantly contributed to better access to health care by poor, underserved tribal populations. Almost all the services have been provided through public private partnerships. Performance data clearly reveal a robust and rising uptake of services. Patient Satisfaction Surveys conducted by independent agencies indicate that counselors, citizens help desks, mortuary vans, etc. were particularly valued by these populations.

### **Ensuring Sustainability**

Given the limited scope, scale and duration of World Bank projects, all three projects made specific efforts to ensure that the capacities built, initiatives supported, and systems institutionalized with the projects' support remained sustainable.



Elderly patients at a Public Health Center in Pudurnadu, district. Tamil Nadu

This was done through a constant dialogue with the states' Directorates of Health and the National Rural Health Mission (NRHM) to ensure there was no duplication of effort and that the innovations introduced would continue after Bank financing was over. For instance, in Rajasthan, where the project introduced mobile health clinics in remote tribal and desert regions, the state government is planning to take these over. Similarly, in Tamil Nadu and Karnataka, the state NRHMs have built the capacity to manage the public-private contracts with the NGOs to run the Mobile Health Clinics and the Citizens' Help Desks. The Tamil Nadu project also convened a two-day workshop in early 2009 to dovetail the efforts of the wide range of stakeholders working on tribal development issues - both government and non-governmental - into an integrated state tribal development plan.

# Spreading the Innovations

## IMPROVING HEALTH **SERVICES FOR** TRIBAL POPULATIONS

he acceptance and popularity of these initiatives and their impact in terms of improved health outcomes for tribal and disadvantaged populations has prompted all three states to undertake a phased expansion of most of these services. The pilots are also being transferred or taken over by individual state health departments or the central government's flagship health program. The shortage of clinical staff at fixed public health facilities in tribal areas and the popularity of

Mobile Health Clinics have led to discussions about expanding mobile health services, improving targeting, enhancing drug budgets, improving their integration with medical facilities for referrals and sophisticated lab tests, and increasing allocations for overhead costs and staff salaries. There is significant scope to expand these initiatives to regions that continue to be underserved or require additional inputs for improving health outcomes.

Inside a tribal mobile outreach van at Ambalamoola. Tamil Nadu



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