The Indian Sundarbans – a cluster of more than 100 islands located in the extreme south of West Bengal – is a unique biosphere reserve of mangrove forests, intersected by tidal rivers and narrow tidal creeks. The area outside the reserve forest is home to about 4.5 million people who subsist primarily on agriculture, fishing and collecting forest products. The highly complex topography of the region, coupled with poor infrastructure, constrains people’s mobility, especially those in remote islands where multiple modes of transportation are required to travel between islands.

Climate change has a huge impact on the people of the Sundarbans. Yearly pre-monsoon cyclones breach the banks, flood the localities, render people homeless, and make agricultural lands unusable for years. The rise in sea-level due to global warming has led a few islands to disappear and poses a future threat to much of the Sundarbans.

The geo-climatic volatility of the Sundarbans makes it unique, not only with respect to people’s livelihood and survival, but also in terms of people’s health status and the health care delivery system. In 2010, Indian Institute of Health Management and Research (IIHMR), a Future Health Systems (FHS) partner, published a study that revealed that children in the Sundarbans are the most vulnerable to health shocks due to unacceptable levels of under-nutrition and high prevalence of communicable diseases. For example, the proportion of chronically malnourished children was 52 percent – higher than both the state (45 percent) and the national average (48 percent). One in three children was found to have suffered at least one episode of respiratory ailments in the two weeks before the survey, compared to 13 percent in West Bengal. A more recent FHS-IIHMR study undertaken in 2013 revealed that over one-third of children are chronically malnourished, and that the prevalence for girls aged 1–3 living in poorer households is almost 60 percent.

Against this backdrop, health service delivery in the Sundarbans is woefully inadequate. The 2013 study showed that publicly-funded health care facilities are non-existent or non-functional in the most vulnerable areas due to staff shortages and weak infrastructure. Those facilities that are functional are generally physically inaccessible. NGOs can reach only a small fraction of the population, despite their best efforts. Consequently, Rural Medical Practitioners (RMPs) – those who practice modern medicine without any formal training or authorisation – are often the only option. Dependence on RMPs is discernibly higher for child health care – about three-quarters of children with diarrhoea or Acute Respiratory Infection problems are treated by RMPs, as compared to about 60 percent of adult patients. That health care in the Sundarbans is almost exclusively provided by RMPs has potentially huge implications for children’s health, due to the varying quality and lack of regulation.

FHS research
As part of the research process, FHS-IIHMR researchers worked with women of the Sundarbans to use Photovoice – a PAR method using photographs and narrative – to raise awareness of the challenges the women face to access health care. The initiative has led local policymakers and health workers to prioritise, and take steps to address, the issues.

Participatory Action Research (PAR) methodologies can help empower marginalised groups to capture and articulate their experiences and concerns to decision-makers. Future Health Systems (FHS) has worked with women in the Sundarbans of West Bengal to use Photovoice – a PAR method using photographs and narrative – to raise awareness of the challenges the women face to access health care. The initiative has led local policymakers and health workers to prioritise, and take steps to address, the issues.
• the geo-climatic uncertainties and their manifestations in life, livelihoods, health and health systems as perceived by the communities
• indigenous adaptive strategies based on traditional knowledge and ground-level perceptions
• triggers for and barriers to accessing the health system
• a pathway of need-based locally-acceptable solutions at the local/state/policy level.

Community members used Photovoice to inform decision-makers about the reality of their lives and to influence public policy on issues like erosion, breaching of embankments, loss of productivity due to salinity ingress, depleting natural resources and the resulting migration, accessibility, acceptability and affordability of the existing health system. Visually capturing the needs of a community is an empowering practice that offers an alternative to traditional methods of facilitated discussion.

What changes took place?
Photovoice has enabled community members to identify and record their community strengths and struggles; to explain their experiences through critical reflection and group dialogue; and to reach policymakers.

The process helped create a unified community voice among the women, which increased the awareness and responsiveness of decision-makers to the issues faced by the communities. This led to various key community actors voluntarily offering to support and facilitate dissemination of the visual research evidence with the Departments of Agriculture, Women and Child Health, and Water Supply at the sub-divisional and district level. Importantly, increased awareness has meant that local policymakers and ground-level health workers are able to prioritise the issues and the steps that need to be taken to address these issues.

More widely, the media has taken up the story told by the women through Photovoice – close to 30 media outlets disseminated the story nationwide – and other researchers have shown interest in the Photovoice methodology.

How did FHS contribute to the changes?
FHS-IIHMR provided orientation and training to the local women on the Photovoice methodology and process, including photo documentation. Participants took two rounds of photographs within six months, interspersed by fortnightly group meetings with FHS-IIHMR researchers as facilitators. With facilitation and encouragement from FHS-IIHMR, the women presented the research findings to different policy stakeholders facilitated at the community and sub-national levels. FHS-IIHMR also provided a platform for dissemination of the participant’s evidence.

What next?
There are many more stories for the women of the Sundarbans to tell through Photovoice and they are keen for their stories to be seen and heard. FHS-IIHMR would like to facilitate this and to make the process more sustainable with the support of civil society actors. There are plans to use Photovoice as a tool to explore the challenges of climatic vulnerability and variability and its effect on health and health determinants in the Sundarbans: ‘Photovoice through the lens of the women on a sinking island’.

Key references
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Future Health Systems is a research consortium working to improve access, affordability and quality of health services for the poor. We are a partnership of leading research institutes from across the globe, including: Johns Hopkins Bloomberg School of Public Health; China National Health Development Research Center; International Centre for Diarrhoeal Disease Research, Bangladesh; Institute of Development Studies, UK; Indian Institute of Health Management & Research; and Makerere University School of Public Health, Uganda.