Predictions are that coming years are going to be much warmer. Frequent occurrence of natural disasters are taking away lives and homes from many. Do we have a plan B?

**GRAMMY WINNER**
Exclusive interview with Tabla Maestro Sandeep Das with CASA
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CASA in Action welcomes letters, views & contributions from our readers. Send in your comments to Isha Banerjee at isha@casa-india.org & Sanjeev Singh at sanjeev@casa-india.org.

Another meaningful and inspiring issue of CASA in Action on Child Rights. Child labour still exists in our social system in various forms and we need to take action now. Highly appreciate CASA's work for protecting child rights through their Bridge Schools.

Gourav Emmanuel Masih  
New Delhi

We are all acquainted with the saying that "A child is the father of the Nation". But do we really mean it. In today's world the worst sufferers are the children. They are the soft targets of any disasters manmade or natural as well as victims of the socio political aggressions. The special edition on children is an opportunity to focus on the space required for them to enjoy their Rights as a Child. Many CSOs and likeminded organizations and child welfare boards are dedicated on child protection; however, it is the duty and responsibility of the law makers in each country to play their own part in providing child safety and make accessible the Child Rights for the future generations irrespective of caste, creed, colour and gender.

Nandita Goswami  
Kolkata

The subject taken to reflect upon as the cover story on the issue of child labour in the last CASA in Action News letter and concerns related around the issue is extremely relevant in today's context. The way the children are engaged in unskilled or skilled based livelihood for survival in the remote part of India as well as in the semi urban needs to be highlighted which often goes un-addressed though not un-noticed. The story is informative and reflects CASA's commitment to address issues concerning on the child labour.

Joseph James  
New Delhi

First of all I would like to congratulate the communication team for bringing "CASA in Action" for the period October to December 2016 as a special edition on children. Children occupy one third of the India's population (35.16% are children under the age of 18 (UNICEF 2013)). So it is good to give importance to the children. The newsletter highlighting the children is highly appreciated.

Highlighting our intervention towards ensuring child rights added more value to our work and to this newsletter. It gives us more boon and encourages our team members to work more. In page no 15 you have mentioned some of the laws related to child rights is highly valued. Further, I would like to give my suggestion that this newsletter page no 2 and page no 4 can be combined and page 5 “write to us” section can be included in the “letter from reader” page.

V. Poul Luther  
Chennai

letters from readers
YOU ARE ONE STEP AWAY TO DOWNLOAD THE DIGITAL VERSION

WWW.CASA-INDIA.ORG
Editorial

Every year, the Indian subcontinent faces drought in some parts, whereas at the same time there are floods occurring in other parts of the country. Last few decades have seen frequent and erratic weather patterns leading to untimely and unpredictable disasters.

Experts and scientists are constantly warning us on the impact of climate change giving rise to large scale migration and conflicts arising out of unavailability of resources. But the effects of climate change have already begun in the form of change in crop cycle and uneven heat cycle at the micro level.

Small and marginal farmers in India with small land holdings are falling prey to climate change. Fickle monsoon and water scarcity has drastically reduced crop yield in most parts of the country. Vagaries of weather and debt have been driving farmers to commit suicide for their incapacity to repay loans and fulfil the basic need to feed their families.

Women and children are also adversely affected by climate change. Women in arid parts of India – where water scarcity is at its peak – have to walk miles to fetch water. Continuous long walks also result in deformation of body. Lack of enough hands to fetch water also forces children to drop out of schools.

It is not the time to take as joke the prediction that next world war will be fought over water. The sudden heating of the ocean resulting in shortage in rainfall and prolonged summers with intense heat waves is a reality we face every year. This along with over-exploitation of natural resources by us has accentuated the problem.

We have led us into a ticking time bomb which will have devastating effects on the present and future generations. This bubble is created by us and must be also dissolved by us by adopting sustainable interventions.

Of course, the global weather is changing, but this edition ‘Feel the Heat?’ delves to understand the climate change phenomenon in the villages of India and how the local communities are dealing with it.

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We would love to hear your views

write to us at:
ishan@casa-india.org
isha@casa-india.org
sanjeev@casa-india.org
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Workshop on Gender Issues

A two-day workshop on gender issues was organized by CASA in close coordination with Karnataka Theological College (KTC) and Karnataka Christian Council (KCC) on 16-17th February this year.

The discussion in the gender sensitizing workshop addressed issues like sexual harassment and honour killing among other related problems faced by women on day to day basis.

‘It is an unfortunate truth that women are sexually harassed and assaulted. Street harassment is common in India and has been getting worse in recent days. Sexual harassment affects persons’ identity, job, physical and mental health and creates anxiety, depression, and constant stress. Research has also shown evidence of sexual harassment association with negative emotions such as fear, shame, anger, and guilt among women,’ the panelists observed.

The workshop encouraged the participants – mostly youths – to be a part of the discussion on various gender issues prevalent in the society. During the paper presentations and group discussion, the young men and women debated on other gender related issues such as harassment in workplace.

The workshop saw engagements from various quarters of social sector. CASA Project Officer South Zone Poul Luther delivered the keynote address on gender issues. The facilitators of the workshop included Dr. H.R. Cabral (Principal, KTC), Dr. R. Annie Watson (Dean, department of women studies, KTC), Prof. P.L. Dharma (Mangalore University), Mrs. Aruna Gojar (Activist), Dr. Rose Veera D’Souza (Prof. St. Aloysius), Ms. Vidyas Dinkar (Activist), Dr. F. Anilkumar (Prof. KTC), Dr. Merlyn Martis (Director-Deeds), Ms. Shahanaz (Editor, Anupama) and Prof. Basil Hans.

Workshop on Outcome and impact Orientation (OIO)

A workshop on Outcome and Impact Orientation was held in Chennai from 1st to 3rd February 2017. A field visit was also organized in this context at Uthukadu, Kanjipeurm District. Altogether 10 staff and 6 Core Group members attended the workshop including Ms. Anke Schuerman, the Facilitator of the workshop.

The OIO concept and application was thoroughly discussed and practiced through interactive and participatory learning methods. The importance of evidence based reporting, capturing the change aspects in quantitative and qualitative terms

All the participants visited the community’s under the operational area of Uthukadu Resource Centre in Kanjipeurm District. The participants were able to field test the tools for data collection on changes made in the lives of the people as an outcome of CASA’s work and intervention in these areas.
CASA also marked Women’s Day on March 8th in Sekurpalem (Tamil Nadu) which is a remote village under Chebrolu Mandal, Bapatla District. The programme was organized by Praja Sanghala Ikya Vedika organisation.

CASA Assistant Project Officer Karunagaran and CASA APSS In-charge Prem Kumar along with CASA staff Preethi Evangeline and Thomas (President of State Forum) shared their views on the importance of women’s rights, women empowerment and gender sensitization.

Discussions were held on the lines of ‘the need and importance of being bold for change’ which was the theme for this year’s International Women’s Day. The need for change in areas of domestic life, children’s betterment and future and women’s role and status in the society was shared with the community.

Being a young woman leader and President of the Women’s Group - Ms. Sujatha - was appreciated for her tireless efforts and commitment in mobilizing the community for the insurance scheme along with our volunteer and staff.

CASA South Zone celebrated the International Women’s Day with rural communities in Dindigul District (Tamil Nadu) with was organized and hosted by the local women’s group. The members of the community and CASA representatives celebrated the day by holding a discussion on the importance of women in our society and the need to involve them in decision making.

CASA Project Officer South Zone Poul Luther Project Officer said that the young girls in the rural areas are not going for higher studies in the present scenario and reiterated the importance of education, particularly girl child education and gender equality.

“Education and women’s equality are important to the individual, their family and the larger community because it raises their value and allows them to be more productive in society. Also, utilization of this kind of celebration is to create awareness on women’s rights and to ensure women’s rights,” Luther said.

The local panchayat leaders, ward members, women’s group leaders, teachers and students assured their support to promote the girl child and provide support for gender equality.

The local community and CASA staff also planted saplings as part of plantation drive and participated in the cultural programmes.
Lymphatic Filariasis
So, we think we know the disease well?

WHAT IS LYMPHATIC FILARIASIS (LF)?
- Lymphatic filariasis (LF) is a parasitic disease, commonly known as elephantiasis. It is caused by thread-like worms known as filarial parasites.
- The adult worms (male and female) settle in lymph nodes and the female worm gives birth to millions of young ones known as microfilariae (mf). Generally no symptoms are seen initially, but the lymphatic system is damaged.
- With no symptoms initially, the persons with mf are not recognized and they continue to transmit the parasite to the community. The persons infected with the parasite may experience frequent acute attacks of adenolymphangitis when they may have symptoms of fever, pain and redness in the affected body parts.
- After 6 to 8 years of infection, clinical symptoms such as swollen legs or enlarged lymph nodes/lymph vessels or hydrocele may appear.

HOW IS LF TRANSMITTED?
- Filarial parasite species in India lives only in man. The adult worm produces microfilaria which circulates in the peripheral blood system of the infected people. When the mosquito feeds on the infected person, it ingests the microfilaria.
- The ingested microfilaria grows and within 12 days it reaches a stage when it can infect another human being.
- When the mosquito with infective stage larva bites another person, the parasite enters and reaches the lymphatic system.

WHO SHOULD TAKE THE DRUGS?
- Everybody in the community, except pregnant women, children below two years of age and persons who are very sick from other illness.

WHEN SHOULD PEOPLE TAKE DEC TABLETS?
- DEC tablets should be taken once in a year on the identified day of MDA (National Filaria Day).
- The tablets should be taken after food. If the tablets are taken on empty stomach, it may cause stomach discomfort.

WHY SHOULD EVERYONE TAKE DEC AND ALBENDAZOLE TABLETS DURING MASS DRUG ADMINISTRATION (MDA)?
- People living in filaria endemic areas, who look healthy, may be carrying mf in their blood without any recognizable symptoms at the initial stage.
- Finding the infected persons at this stage and giving them alone treatment is tedious.
- Both DEC and albendazole are safe and even non-infected can take the drugs.
- DEC kills mf and albendazole normally clears intestinal worms which is an added benefit. When both the drugs are given together, it has effect on adult worm and therefore the parasites will be destroyed preventing the infected person from developing disease.
- When every individual in the community takes drugs under MDA, microfilaria will be cleared and not present in the blood for the mosquitoes to transmit.
- MDA repeated annually over 5-6 years may interrupt transmission. This eventually leading to future generation being free of this infection.
ARE THERE ANY SIDE EFFECTS OF DRUGS?
- DEC and albendazole are safe drugs, which are in use for the last 50 years around the world.
- People, who look healthy but have parasite in their blood, may experience some side (therapeutic) effects due to the killing of parasites following drug consumption.
- One or combination of the following side effects may be experienced by a small proportion of population especially microfilaria carriers:
  - Fever
  - Headache
  - Body ache
  - Vomiting
  - Dizziness
  - Rash and itching occasionally
- These side effects are self-limiting, usually disappear or subside within a day without any medication.

CASA understands the sociocultural impact on the affected patients, that is why our volunteers try to break the stigma by washing and treating their limbs in public workshops.

Volunteers have been demonstrating Foot Care Management and other hygiene-related techniques to help reduce swelling and pain so that patients can lead a normal life.

CASA gives hygiene kits to the affected persons which contains antifungal creams, medicated soaps, bandages, towel among other relief items.
CASA, along with Government departments, help in anti-filaria mass drugs administration in rural areas.

Volunteers conduct door-to-door and village-to-village community awareness programmes and training workshops in an effort to eliminate LF.

Volunteers also monitor the progress & improvements of the patients in terms of physical and emotional aspects.

Participation of community groups is necessary in achieving sustainability and improving lives of the patients. We try to motivate patients and the community members to take part in the LF awareness programmes.

CASA has reached 30,000 people
Living with Lymphedema in five districts of Odisha and West Bengal where Lymphedema is most prevalent.

A CASA Hygiene Kit contains
- 2 medicated non-scented soaps
- 2 towels
- 2 antifungal ointment
- 1 bandage roll
Sound of tabla echoes at the Grammys

2017 winner of the prestigious award, Sandeep Das opens up about his journey into classic music and pursuing a career in mastering tabla with CASA reporter Isha Banerjee

1. You were among a very few Indians to get 3rd Grammy nomination. Were you surprised to win this time or somewhere in your heart you were confident of winning it, considering the fact that it is difficult for other nationals to win such coveted awards?

First of all let me clarify that this win is for the Best World Music Album called Sing Me Home as a member of The Silk Road Ensemble of Yo-Yo Ma and not in any Solo category. Unlike sports where your ultimate goal is to win trophies, in Art your win is when people love your work of art or the music you have created. Art of any kind is not created to win awards.

Of course we are all very happy to be recognised for our work as a team and are celebrating. It's like Brazil winning the world cup!

2. Did you face discouragement or resistance to pursue Tabla as your first career choice, and instead choose a mainstream career?

I studied in St. Xaviers, Patna then went to Patna College from my plus two and then Graduated in English Honours from BHU. But instead of facing any resistance I always received tremendous support. My father Sri K.N Das had the vision to put me into Tabla learning and then supported me wholeheartedly. When faced with taking the decision to whether pursue academics or music I called him to ask what I should do now? He said “Go Follow your Heart!”

“What will make you happy? Being a top class artist or a Top CEO? ” Pat came my reply “Baba you know Tabla!” But there is no security in music, to that he said “My Son nothing is secure or insecure, it is you who will make something secure or insecure…Go Follow your heart!

And here I am!

3. Why did you choose Tabla? any story behind it.

Ha ha ha, My father got a complaint from a teacher at school saying I disturb the class by tapping on the desk and when asked to stop, by taping with my feet. I should be taken to a doctor. Instead of doing that he bought me my first pair of Tabla and took me to my first Guru Pt.Sheo Kr.Singh ji. When both noticed that I had the capacity to go forward my father then took me to the Harvard or MIT of Tabla Pt.Kishan Maharaj Ji in Benaras.

My father would lament that why is it that we start with the best options like AIIMS, IIT and IIM when it comes to studies but are satisfied with sending our kids to anyone and anywhere when it comes to the arts and still expect them to be good at it.

I am grateful for his and my mother’s support to him for pushing me in the direction he did!

4. You have a training institute where children from many countries come to learn Tabla from you and is quite popular. On the other hand, one could see a wave among Indian youths to learn western instruments like guitar and drums. Don’t you think the cross-cultural exchange is depleting our classical music heritage?

We should stop mimicking the west! My Guruji used to say “Xeroxies end in the garbage!” Similarly you can only be a copy when you take on someone else’s music or art. Whereas our music is in our blood it is only a matter of getting exposed to it. The younger generation should learn one thing deeply enough before venturing to collaborate. Cross cultural exchanges enrich but only when done at the best level possible not half cooked or half baked. Nothing grows in isolation but your roots have to be deep first to be not blown way!

5. EDMs or Electronic Dance Music is becoming a rage in India. Do you think one of the ways to make classical music popular again among youths could be through extensive instrumental collaborations within EDMs?

There is a reason Classical Music is not called POP music, right? It will always
have a niche following and it is not meant to be played to fill stadiums. It has to be a combined effort from the society and specially the Media which is obsessed with only a few things like Cricket, Bollywood etc. I remember buying newspapers to read reviews of concerts after every performance in Delhi and elsewhere. Where are the critics like Ragga R Menon now? We don’t even have pages dedicated to Art and Culture. Pick up any reputed western newspaper like The New York Times, The Independent etc and see for yourself how many pages they have for the same!

6. Do you like performing for the Indian audience or for the foreign audience? Where do you feel more satisfied?

The greatness of the west is that they love and respect you for what you have rather than whose son or which family you come from. They come with open minds, buy tickets and support good music. They don’t run only after the few who have sold themselves to PR agencies well and thus they are NOT limited to only a few stars ever.

Musically it is a different feel playing at festivals like The Saptak or Hariballabh or Dover Lane etc. Cause the audience responds to every twist and turn, every musical move you make on stage in India, cause there are some knowledgable people sitting.

So the satisfaction is of a different level.

7. Many musicians back here in India are saying that Sangeet Natak Akademi comes first and then comes any foreign coveted prestige. What is your take on that.

I can only speak for myself and would like to clarify that I have never coveted any award, either the SNA award or the Grammy, national or international awards. Anyone who has known me including the very maestros in question will acknowledge that in private and most others in public easily.

However, I am proud to be a member of the prestigious Silk Road Ensemble headed by the legendary Yo-YoMa and rejoice with the Ensemble at having received the Grammy this year for our World Music Album. I have been taught both my parents and guru to accept any praise, or award, or reassurance with humility because I know there are many deserving artistes for every award that is instituted. Therefore I do not take my awards and my good fortune for granted.

As far as working and making a name for myself in India is concerned, I can say with humility that classical music lovers from the North to the South, East to the West everywhere in the country have heard me and loved my playing for the last 25 years. And the very maestros in question have either been on stage with me or have appreciated my playing wholeheartedly on many occasion.

I am probably one of the very very few artists that have an organisation NOT to promote myself but run a scholarship for visually impaired children to learn music whose numbers have grown from 2 to 6. And have disciples that I have taught for free from all over the country and the world! 

*Sandeep Das is a member of THE SILK ROAD ENSEMBLE of Yo-Yo-Ma receiving award at the Grammys*
Timely and predictable disasters and natural calamities were nothing new to India’s geography. But until recently the unexpected complex nature of calamities which are driven by human factors is making it less clear on what the impacts will be or where they’ll happen or to what degree. Places which were not vulnerable to disasters are now falling in the vulnerable zones. Climate migrants are forced to flee their habitats. Climate change crisis is for real. But taking steps locally in mitigating and adapting to the future risks of climate change. **CASA Field Reporter Isha Banerjee** travels across Uttarakhand to understand the global phenomenon of climate change affecting the local communities and how are they dealing with it.
India witnessed 20,667 incidents of forest fire in 2016 compared to 15,937 incidents in 2015, 19,054 incidents in 2014, 18,451 incidents in 2013.

Worldwide, forest fires are considered as one of the major drivers of climate change having adverse impacts on the environment.

Forest Survey of India (FSI) has estimated that 1.45 m ha of forest is affected by fire annually with 6.17% of the forests prone to severe fire damage.

Serious respiratory problems arise when forest fires release noxious gases like carbon dioxide, carbon monoxide in the air.

Source: Forest Survey of India
Surface Fire:
A forest fire may burn primarily as a surface fire, spreading along the ground as the surface litter (senescent leaves and twigs and dry grasses etc) on the forest floor and is engulfed by the spreading flames.

Crown Fire:
The other type of forest fire is a crown fire in which the crown of trees and shrubs burn, often sustained by a surface fire. A crown fire is particularly very dangerous in a coniferous forest because resinous material given off burning logs burn furiously. On hill slopes, if the fire starts downhill, it spreads up fast as heated air adjacent to a slope tends to flow up the slope spreading flames along with it. If the fire starts uphill, there is less likelihood of it spreading downwards.

## Forest Fires: The Next Big Hazard

When the world was woken up by the dangerous and non-stopable forest fire in Australia a few years back, a corner of Indian Himalayan region was going through the same hazard. Several lives were lost and there was an unaccountable damage to the property.

India has been facing this issue for a very long time. While the wildfires is an ancient phenomenon which was either natural (low intensity) fires, the current forest fires goes out of extinguishing control of the communities.

Forest fire in Uttarakhand has been a growing phenomenon in the recent past. While “many” think this is a natural uncontrolable disaster, the locals say that the forest fire incidents have increased drastically in few years because of the “increasing demand of timber industry and nobody is willing to put an end to this commerce.”

Forest fires also pose serious health hazards by producing smoke and noxious gases, as the events in Indonesia after the forest fires on the islands of Sumatra and Borneo in 1977 have shown. The burning of vegetation gives off not only carbon dioxide but also a host of other, noxious gases (Green house gases), that lead to global warming and ozone layer depletion. Consequently, thousands of people suffered from serious respiratory problems due to these toxic gases.

Forest fires pose a threat not only to the forest wealth but also to the entire regime to fauna and flora seriously disturbing the biodiversity and the ecology and environment of a region. During summer, when there is no rain for months, the forests become littered with dry senescent leaves and twinges, which could burst into flames ignited by the slightest spark.
In December 2016, Uttarakhand High Court passed an order taking exceptionally a strict stand on a petition related to rampant forest fires in the hill state. If the forest fire continues for

<table>
<thead>
<tr>
<th>Time</th>
<th>Action</th>
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<tbody>
<tr>
<td>More than 72 hrs</td>
<td>Principal chief conservator of forest shall be deemed to be put under suspension and disciplinary proceedings shall be initiated against him for not preventing/controlling forest fires.</td>
</tr>
<tr>
<td>More than 48 hrs</td>
<td>The conservator of forest shall be deemed to be put under suspension.</td>
</tr>
<tr>
<td>More than 24 hrs</td>
<td>The concerned divisional forest officer shall be deemed to be put under suspension.</td>
</tr>
</tbody>
</table>

Source: Times of India, Dec 19, 2016

Residents of Uttarakhand’s Tipli village say

“Last time around this year, we had to cover face while stepping out of our houses because the entire surrounding region was filled with smoke. Our village in Tehri was surrounded with forest fire which had begun in February and had continued to July. Forest Fires occur mostly during February to June every year. Forest fire was earlier used to clear the field in order to harvest new crops. But it was done in a traditionally controlled way. It was a very common practice back then. But now, commercialisation of forest to extract timber has resulted in uncontrollable fires which is making it difficult for us.

We have been using traditional knowledge like making a mud boundary all along the forest boundary around our village so that forest fire cannot enter our area. “Forest Fire Line” is used to prevent fire breaking into the forest from one compartment to another. The collected litter was burnt in isolation.

We are also putting to use scientific knowledge like keeping the source of fire or source of ignition separated from combustible and inflammable material, and keeping the source of fire under watch and control. CASA helps us in reducing the damages caused by these forest fires.”

Aranya Ranjan
Uttarakhand Jan Jagriti Sansthan

“A state like Uttarakhand which is a pioneer in Green Revolutions like Chipko Movement is going through forest fire hazard every year, causing loss to lives and property. The villagers and their livestock are found dead while trying to control the fire. The people have started complaining about breathing problems. More than 2,000 incidents of forest fires destroying 4500 hac. of forest cover in state of Uttarakhand should have been a serious matter to be taken up as national emergency which unfortunately did not happen. 2016 fire was uncontrolled due to its intensity and extent of damage, and it was twice as huge as 2015.”
On an average 73 people lost their lives every year in Uttarakhand since 2001 from landslide and flash floods related incidents.

80% of reported fatalities are due to landslides in developing countries: GSI

More than 12% of India’s land mass is prone to landslides: Geological Survey of India (GSI)

12.5% of the country’s total area is flood prone: GSI

Source: Geological Survey of India
National Disaster Management Authority
Major floods/cyclones/landslides in India

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of Event</th>
<th>Year</th>
<th>State &amp; Area</th>
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<tr>
<td>1</td>
<td>Floods</td>
<td>Oct 2014</td>
<td>J &amp; K</td>
<td>* 300 died</td>
</tr>
<tr>
<td>2</td>
<td>Cyclone Hud Hud</td>
<td>Sept 2014</td>
<td>A P Odisha</td>
<td>* 46 died</td>
</tr>
<tr>
<td>3</td>
<td>Odisha Floods</td>
<td>Oct 2013</td>
<td>Odisha</td>
<td>21</td>
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<td>4</td>
<td>Andhra Floods</td>
<td>Oct 2013</td>
<td>Andhra Pradesh</td>
<td>53</td>
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<td>5</td>
<td>Cyclone Phailin</td>
<td>Oct 2013</td>
<td>Odisha A P</td>
<td>23</td>
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<tr>
<td>6</td>
<td>Floods/Landslides</td>
<td>June 2013</td>
<td>Uttarakhand HP</td>
<td>4,094 died</td>
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<td>7</td>
<td>Cyclone Mahasen</td>
<td>May 2013</td>
<td>Tamil Nadu</td>
<td>08</td>
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<td>8</td>
<td>Cyclone Nilam</td>
<td>Oct 2012</td>
<td>Tamil Nadu</td>
<td>65</td>
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<tr>
<td>9</td>
<td>Uttarakhand Floods</td>
<td>Aug-Sep 2012</td>
<td>Uttarkashi, Rudraprayag &amp; Rageshwar</td>
<td>52</td>
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<td>10</td>
<td>Assam Floods</td>
<td>July-Aug 2012</td>
<td>Assam</td>
<td>-</td>
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<td>11</td>
<td>Cyclone Ihane</td>
<td>Dec 2011</td>
<td>TN, Puducherry</td>
<td>47</td>
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<tr>
<td>12</td>
<td>Odisha Floods</td>
<td>Sept 2011</td>
<td>19 Districts of Odisha</td>
<td>45</td>
</tr>
<tr>
<td>13</td>
<td>Cloudburst</td>
<td>2010</td>
<td>Leh, Ladakh in J&amp;K</td>
<td>257 people died</td>
</tr>
</tbody>
</table>

Source: National Disaster Management Authority (NDMA)
* Figures taken from other sources

Flooding & Landslides: Becoming Unpredictable

Kashmir saw unprecedented rainfalls in 2014 resulting in worst floods since 1959. The disaster nearly killed 300 people and many were left displaced out of their habitations. This was the second biggest disaster in two consecutive years after Uttarakhand floods and landslides triggered by sudden cloudburst killed nearly 5,000 people and literally devastating the state.

Disasters like floods and landslides are nothing new to the hilly terrain. But the nature of these disasters has become more frequent, more unpredictable and more untimely. Is this the effect of climate change? Why has the occurrence of floods and landslides increased in the couple of decades?

Environmental geologist K S Valdiya lives in Uttarakhand and told to Down To Earth magazine that “flash floods have little to do with geology. They are related to the rainfall pattern that has changed considerably over the years due to warming up of the atmosphere. There has been evidence that with increasing atmospheric temperature, precipitation during the rainy season is no longer uniform.” He also said that the flash floods of Uttarakashi in 2013 was “entirely man-made.” “Historically, people avoided floodways for building houses and only did agriculture there. But decades of human activities have destroyed the geomorphic difference between floodplains and floodways. Now, there is construction work not only on floodway, but also close to the river channel. Unlike railway lines and bridges which span the floodways, roads and bridges get easily washed away because developers are least concerned about geological structures,” Valdiya said.

Post 2004 Tsunami, India became more cautious towards handling disasters as massive as this. The school curriculum started disaster awareness course – a model inspired from Japan’s government’s awareness drive on managing strong disasters like earthquakes. Is it time to not let floods and landslides catch us unaware and must be armed with knowledge to tackle such rudiments.
**Phool Das**  
Resident of Tipli village & former sarpanch  
“Landslides or cloudbursts were rare phenomenon until some 15 years ago when they are frequently happening on our watch. The crop cycle has changed. Mangos which used to ripe by April are maturing in March. We demanded roads, but there have been other adverse impacts with the onset of development. More landslides are happening. The roads are getting into the interior forests areas. There has been an excessive usage of the forest supplies. The road blasts are happening by machines now other than manual labour. When there is rainfall there is landslide, even during small rains.”

**CASA’s HAND-ON EXPERIENCE**

During June 2013 landslides followed by massive floods in Uttarakhand which nearly killed 5,000 people, CASA was one of the first responders to first aid and long-term development in the devastated areas.

**MAJOR LEARNINGS:**

- The disaster was triggered by the sudden cloudburst in the upper Himalayan region and the people were not ready to tackle the havoc.
- Commercial encroachments in the form hotels and restaurants near the rivers banks maximised the damage.
- The impact of disaster could have been reduced if deforestation was kept on check. Absence of enough forest made the mountainous soil loose and unable to withhold the impact of flooding or landslides.

**Arsenic Water**

Millions of people in the deltaic regions of West Bengal are exposed to the arsenic hazard. The contamination is chiefly restricted within the shallow aquifers (50 to 200 feet). Diseases like hypopigmentation, keratosis and skin cancer manifest the health hazard. Arsenic contamination in ground water beyond permissible limit has also been reported from certain parts of Bihar, Chhattisgarh and Uttar Pradesh. Arsenic is carried in water / water borne sediments of rivers. During monsoon flooding, arsenic in flood water percolates sub surface, causing contamination in the abandoned channels. In the flood plain domains the clay blanket works as a filter and prevents percolation. *Source: GSI*

After three years, 29-year-old Budi Lal of Uttarakhand feels a “lot safer” during monsoons. He says “the permanent roof has given my family an immense confidence in believing that we have laid the foundation for a better life.” In 2013, Budi’s house in Kunjeti was swept away in the massive flash flood in Uttarakhand and the government declared the area as unstable. Having left his native village and living in a temporary structure for months, his family is slowly gathering pieces to start a new life. CASA helped Budi and many people like him to build permanent shelters in Guptkashi to help rehabilitate the victims of the disaster. “We want to stay here because everything will gradually fall in place. We have also planned to buy cattle and build a cow ranch once we get work and the income is steady,” Budi says.
10% of the global population is at risk of forced displacement due to climate change

Global warming will force up to 25 million or 1 billion climate refugees to move either within their countries or cross borders by 2050

Scarcity of water, crop failure, excessive debt, frequent disasters in India has resulted in widespread human and cattle migration to urban settlements

India, China and the Philippines experienced the highest levels of displacement in absolute terms, both in 2014 and for the 2008 to 2014 period.
Displacement related to disasters in India in 2014

- **Odisha**: 1.07m
- **Jammu & Kashmir**: 8,12,000
- **Assam**: 6,39,300
- **Meghalaya**: 3,67,000

*Source: Global Estimates 2015

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Where will **Climate Refugees** Go?

India is vulnerable, in varying degrees, to a large number of disasters. More than 58.6 per cent of the landmass is prone to earthquakes of moderate to very high intensity; over 40 million hectares (12%) of its land is prone to floods and river erosion; close to 5,700 kms, out of the 7,516 kms long coastline is prone to cyclones and tsunamis; 68% of its cultivable area is vulnerable to droughts; and, its hilly areas are at risk from landslides and avalanches. Moreover, India is also vulnerable to Chemical, Biological, Radiological and Nuclear (CBRN) emergencies and other man-made disasters, according to GSI.

Displacement for populations due to erratic and extreme weather, a fallout of climate change, has become a scary reality for millions of people across swathes of India. Indian economy is inextricably tied to climate-sensitive sectors like agriculture, which are already facing multiple stresses, and global environmental change could further exacerbate these stresses. Migration and especially internal migration, is already a challenging question and the current discourse does not adequately address pertinent issues such as seasonal and circular migration, portability of rights and social entitlements, lack of formal residency rights among other challenges.

Rising sea level will affect coastal regions where several megacities, such as Mumbai, Kolkata, and Chennai, are located. Flooding along the major rivers along with storm surge impacts and greater salt water intrusion is likely to affect a large number of people due to high population density and poor urban planning. Further, the Himalayan region that has 51 million people practicing hill agriculture whose vulnerability will increase as a result of melting glaciers coupled with an intensification of the monsoon.
Women of Tipli village

“Migration was happening at a very rapid pace.
The agriculture was fast losing interest in the village as there were more disasters and less income. People especially youths went out in the cities to find better income sources rather than investing time in agriculture. Now you could see very less youth in our village as they have migrated to cities.”

Only one such instrument in Uttarakhand

Weather Recoding Station was established by CASA through which the community members were given training on operating instrument.
Farmers were trained in collecting agro-weather information like air temperature, RH, rain gauge, soil temperature, wind flow, direction, Soil Testing and weather recording.

The data is shared with government experts Krishi Vigyaan Kendra (KVK) and agricultural university. The experts come according to their routine and crop cycle. They take the 3 months, fortnightly data, weekly data; they tell the community members on treating seeds, which seeds will give more production, etc.
This has become a very feasible technique for both the communities and the experts.

Meteorological department have also helped in this. For prediction, they need 5 years of data. Till now the village has collected three years of data. The Uttarakhand has not one such instrument in this village only. The village (Tipli) has come in the limelight in and around nearby 50 villages due to this weather station. KVK people are now frequent visitors to this village and they do demo of new agricultural techniques during showing season of each crop.

The rise in temperature and change in crop cycle was keeping the farmers in Uttarakhand in stress.
They were going through robust problems:
Increasing incidence of climate related disasters such as flood, drought, new insects/pests, crop diseases, fire etc.
Agro-meteorological information generated in stations/research institutes and that could not reach farmers on time for their use.
To protect and enhance agricultural production and secure the livelihood of people dependent upon agriculture.
To use meteorological forecast along with other technological advancement and adapt timely mitigation process to save the crop growth.

It was a small step, BUT BECAME AN INTEGRAL PART

Community Based Organisations were formed and farmers from the villages who were interested to apply the scientific techniques in the fields were selected.
Weather recoding station was established and training on operating instruments. Farmers were trained in collecting agro-weather information like air temperature, RH, rain gauge, soil temperature, wind flow, direction, Soil Testing and weather recording.
Regular meetings were conducted in Climate Farmers School to discuss the local agricultural issues, and find out most possible ways for remedies and viability of the model. It aimed to disseminate climatic information to minimize the adverse impacts of flood, excess rain hailstorm and deficient rain.
Established linkage of the villagers with the experts from Indian Meteorological Department and Krishi Vigyaan Bhawan (KVK).
Women and Climate

The lack of or access to the most basic resource - water, is an issue that is a direct result of the climate problem. Women in rural India are forced to walk for several miles to fetch water. The sanitation requirements of women take a backseat in face of the needs of men. Lack of proper sanitation facilities render women at a high risk of disease epidemics. Besides this, not being empowered with information to access resources during times of climate disasters is another pressing issue.

“Women should be part of any agreement on climate change - not as an afterthought or because it's politically correct, but because it's the right thing to do” – Thoraya Ahmed Obaid, UNFPA Executive Director.

Climate change has put the entire universe into imminent risk. It poses significant threat to all of creation. The survival of people, communities, flora and fauna as well as fundamental human rights, are at risk and addressing the risks must be deliberate and holistic. The actions of the rich and powerful have made the poor and the weak suffer the brunt of Climate Change. Growth and capitalist development paradigm being a huge threat to the environment, new and alternative paradigm of inclusive development which is sustainable in nature has to be put in place at the earliest, as the just solution for Climate Change.

Climate change has a greater impact on those sections of the population, in all countries, that are most reliant on natural resources for their livelihoods and or who have the least capacity to respond to natural hazards such as droughts, landslides, floods, hurricane. Women commonly face higher risk and greater burdens from impacts of climate change in situations of poverty and the majority of the world's poor are women.

Women's unequal participation in decision making process and labour markets compound inequalities and often prevent women from fully contributing to climate related planning policy making and implementation, for too often women are subject to many society ills that results in lack of mobility lack of access to inputs and production and education resulting in limited business and professional opportunities. Women administer sustainable resource management and lead sustainable practices at the household and community level.

Economically and culturally, most Indian women are dependent on men and rarely have an independent source of livelihood or the ability to make decisions for the household. Climate change negatively affects the availability of resources, leading to situations that cause women to make sacrifices for their families. During periods of food shortage, women forego meals for the sake of their husbands and children and thus exposing themselves to malnutrition and other health risks, also increasing the vulnerability of their future children to premature birth and the inability to lactate.

Financial crisis call for girl children to be withdrawn from schools and other educational institutions thus disallowing them from acquiring semi professional or professional skills or training so as to qualify for skilled labor. Thus, they are more likely to be married off early and undergo unwanted pregnancies which also contribute to perpetuating the cycle of depression and poverty. Increased population and decreasing resources compound the problem of climate change and thus it is imperative that girl children are given access to education to maintain small and stable families.

Climate disasters lead to loss of lives and property, large displacement, loss of livelihoods and lack of access to basic needs, as well as rise in violence and human rights violations. However, the impacts are more adverse on women than men, and particularly single women, women from dalit, tribal, minority, landless and migrant households and women living with HIV or disability. Gendered power relations between men and women lead to greater abandonment, malnutrition, ill health, work load and livelihood losses of women than men, as well as heightened vulnerability to sexual abuse, trafficking and other forms of violence against women and girls. Transgender and women have lesser access to relief and rehabilitation or compensation for losses of their specific livelihoods. Access to toilets, bathing spaces and safe shelter are issues for transgender and inter-sexed people.

Where patriarchy is more deep-rooted, where female literacy and nutrition is already low where government law/policies are repressive for women the impact is worse.

Despite being severely affected by climate change, women are underrepresented at forums that discuss and decide policy to tackle climate change. Released on
10 November 2015, the UNESCO Science Report: towards 2030 observes that ‘women are not represented equally in the key climate-change related sectors of science as skilled workers, professionals or decision-makers.

Although they are fairly well represented in some related science disciplines - including health, agriculture and environmental management - they are very much a minority in other fields that will be vital for the transition to sustainable development, such as energy, engineering, transportation, information technology (IT) and computing - the latter being important for warning systems, information-sharing and environmental monitoring.\(^7\)

The role of women in mitigation measures should not be under-estimated. Developing countries have the potential to reduce or store greenhouse gases, particularly in areas in which women are already active. Thus providing energy for the household is usually a woman’s job and she often resorts to the energy-inefficient open burning of biomass, e.g., firewood.

The use of efficient energy systems at the household level (e.g., special cooking stoves and ovens) could reduce emissions and harness the potential of women as actors for mitigation measures. Women worldwide are also involved in natural resource and forest conservation. The forests supply women with vital products and are used not just to gather firewood, but also to obtain other raw materials, food or medicinal plants to provide for their families and to boost their income.

The conservation and care of forests coupled with reforestation and afforestation for which women are responsible helps avoid the emissions caused by deforestation and leads to greater sequestration of greenhouse gases from the atmosphere. Women therefore contribute directly to climate mitigation. Given their significant role in mitigation and adaptation efforts, it is imperative that women be involved in the relevant measures.

Under the Paris Agreement, gender equality and empowerment of women was acknowledged so that gender differences and inequalities are not only recognized but identified and addressed in a manner that provides for accountability (articles 7.5 and 11.2).

We should recognize that women due to gender inequalities are disproportionately affected by long-term climate change particularly in developing countries like India, where they are often more reliant on natural resources for their livelihoods.

To avoid being overlooked and marginalized women therefore must be at the heart of the climate discussion at all levels of decision making from local level to UNFCCC negotiations as the global transition to renewable energy is progressed.

The actions which we need to take to make the Paris Agreement work is to prioritize capacity building, liaising and coordinating with other streams and departments, using the expertise of women and women’s leadership and setting up responsible mechanisms and action plan. Working closely with country gender action plan and contribute to it is the key to ensure that we achieve the goal of keeping the climate under 1.5 degree celsius.
13 states were declared drought-hit in 2016

At least 330 million people were affected by drought in India in 2016.

Water availability in India's 91 reservoirs was at its lowest in a decade, according to the Central Water Commission.

2016 saw Kerala being hit by one of the worst droughts in 115 years.

Source: Central Water Commission
The Bundelkhand part of Uttar Pradesh comprises of seven districts: Jalaun, Jhansi, Lalitpur, Hamirpur, Mahoba, Banda and Chitrakoot.

It produces rabi crops like chana (gram), masur (lentil) and matar (pea) in large quantities. The cropped area during the rabi (winter-spring) season is around 18.50 lakh hectares (lh). But the fact that the corresponding area in kharif (summer-monsoon) has hovered just around 9 lh manifests that farmers are largely dependent on a single harvest. To understand this, one must also appreciate the peculiar circumstance prevailing in Bundelkhand. This region has traditionally been rain fed and suffers from shortage of water.

Kailaha village in Manikpur block of Chitrakoot district is home to some of the poorest and marginalised people in Bundelkhand, an unforgiving land where about half of its population i.e. 76622 million people live below the official poverty line, close to destitution, where they have very little to eat and each day is a struggle to earn a meal for the day. As I sat surrounded by the people of this village, I was repeatedly told that even after adequate rainfall last monsoon their condition is even worse than the previous year.

To understand what these villagers are trying to say, one must look at not just the total quantity of rainfall in a particular year but also its timing and pattern. Bundelkhand had seen subnormal rainfall for seven straight years, 2016 being the only exceptional year, with the shortfall exceeding 50% in many areas, reveals official data.

In a water-starved region where 80% of the population lives in villages, there's virtually no industry and people mainly depend on agriculture to sustain their lives, this has had calamitous consequences. Even when the overall rainfall has been good, the shortening of rainy days and varying intensity of showers during the monsoon, which many scientists completely attribute to climate change, have often driven smallholder and marginal farmers to despair.

Over a period of time population increased and we started sowing wheat varieties which were imported from the state of Punjab. The imported seed of these wheat varieties required large quantity of water to grow. This shift in crop variety forced the farmers to take more loans from the money lenders and banks as we need to dig deeper in search of water available for tube wells. On the other hand due to overall increase in heat, cereal crops particularly wheat matured earlier. The stalk grew quickly without allowing adequate tillers to emerge, leading to overall reduction in yield. There were problems in proper grain formation as well.

“Because of inferior grain quality and often failed crops, farmers were unable to
repay their loans; they began to migrate to escape from the clutches of the recovery agents of the banks and money lenders and also in search of alternative source of income. Economic distress worsened and more farmers committed suicide. Erratic rains; shifting weather patterns, longer spells of drought accompanied by frequent flash floods has further worsened our situation.”

Shiv Mangal Baba, another farmer and a known proponent of the traditional yet effective ways of farming explains: “Bundelkhand is amongst the worst places on earth to be a farmer. Decades of land and water mismanagement made worse by anaemic showers and changing rainfall patterns triggered by climate change have led to untold misery for its largely agrarian population” but many community workers and experts say the situation is not irrevocable.

The region may yet prosper by adopting better ways to conserve water, with a more sustainable and varying use of the land. "It is not as if it is not raining at all in Bundelkhand, the problem is that the little water that falls on the ground runs off. This can very well be stopped in ponds that are dug with close attention to the lay of the land to intercept the natural flow of the water.”

The community members along with Shiv Mangal Baba then showed me one of the 32 ponds which they have de-silted and cleaned so that the monsoon water can be intercepted and stored for a longer time. These villagers were trained by CASA’s partner organisation staff in water storage, monsoon water interception and re-charging ground water techniques. One of the most common yet largely ignored practice which the community is following is that that they have planted trees and plants all along the border of the ponds so that water from these ponds do not get evaporated easily.

Kamal Kumar, CASA’s Senior Programme Coordinator in the state of Uttar Pradesh further explains, “The intervention to retain water must be adapted as per the local specific condition. He tells that some areas in the region have adopted micro-watershed development, which requires building tiny check dams along the natural flow of water and embanking the farmland. These micro interventions have brought significant improvement in recharging the wells and retaining moisture in the soil even in periods of insufficient rain.”

Babu Ram, one of the members of CASA’s partner organization further explains, in order to mitigate the effects of rapidly changing climate, the first important step is to have durable sources of water in the area, digging ponds that recharge aquifers, is necessary but still addresses only a part of the problem of bringing life back into Bundelkhand. More steps are needed to improve the condition. Embanking the edges of fields to catch the water where it falls and prevent its run-off is another way of re-charging ground water level.

The embankments, known locally as medhbandh, work particularly well in areas with the partially sandy soil found across Bundelkhand. He also suggests that it has to be taken further by changing the way we use our land and a change in the crop pattern.

Today, even though the condition of these poorest communities is not much better, they still have a desire and zeal to come out of their despair.

One more farmer, Bhure Lal, from the same community sums it up wisely “The practice of water-intensive agriculture is alien to Bundelkhand.

The Bundelkhand region of Uttar Pradesh state indicates a more emphatic change in weather patterns, a more pronounced departure from expected weather behaviour than would have been observed in the case of just a prolonged drought. It is in this context that the increasing erratic weather behaviour as seen by people, particularly farmers, should be linked to the global phenomenon of climate change and understood in this context.
Climate demands change in Homo sapiens

The eco-centric concern is not just a moral theory; environmental destruction can bring an end not just of human civilisation as we have known in this generation, but indeed of all life on the planet. The domination of the Homo sapiens (human) over other species in the recent history of the earth, and their lifestyle has brought to the fore questions about the sustainability of resources and quality of life.

"The concept of Justice is fundamental to the environmental concerns of contemporary society. It is important to remind ourselves of the two major ecological critiques...... First, these societies are not sustainable as they aspire for continuous growth in a world that has limited renewable resources and a restricted ability to absorb the pollutants of this society. Second, the aspiration for unending growth is not just impossible but also undesirable; for it places human beings at the centre of the world and the natural world is seen as simply a means for human consumption. A sustainable society has to respect the limits imposed by nature and redefine human needs and wants.

Climate change is the result of complex natural and human factors. Thus, it has been interpreted differently by different people, i.e. scientist, industrialist, conservationist and theologian. The environmentalists argue that even though climate change cannot be accurately projected, a complacent attitude should be avoided as the future can be worse than what industrialists think. The United Nations Framework Convention on Climate Change defines it as, “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods”.

Whatever way climate change is interpreted, the policy of unlimited growth among industrialized countries and the drive for profit of big corporations has direct relation to environment. According to the WCRC Accra confession, ‘in 1989, one species disappeared each day and by 2000 it was one every hour. Global warming, the depletion of aquatic life, deforestation, soil erosion, and threats to fresh water are among the devastating consequences of aggressive growth and profit. Communities are disrupted, livelihoods are lost, coastal regions and Pacific islands are threatened with inundation (pt.8).’ Therefore, an analysis of climate change is important from this perspective because it is considered that if human activity that causes detrimental climate change is not regulated, the survival of the entire life on the planet Earth is under threat.

The crisis is deeply linked to a model of ‘growth’ that treats nature as a commodity with unrestrained competition, untamed consumption, infinite economic growth, and accumulation of wealth without social/ environmental obligation. This, without any alternative, demands an endless flow of sacrifices from poor and nature.

India, being influenced by such ‘growth’, has to view its development path carefully as natural wealth is not only the basis of ‘economy’ but more importantly, it is the source of life for 1.25bn human and unaccounted non-humans in the country. The casual and unplanned path of ‘development’ in past decades has shown severe effects on our life giving rivers, forest cover and biodiversity. Our food rich agricultural land size has shrunk drastically, and most of it has now been highly contaminated. This is becoming a threat to life, not only in this country, but also for the health of the global eco-system.

Brian Baxter, an educationist on environmental politics, argues that
1. Human being must seek to arrive at some conception of ‘enough’ to define the degree of material well-being and consumption which is acceptable to all human beings.
2. Human beings have the responsibility to limit their number so that they don’t get into the position of having no alternative in order to meet the demands of social justice, but to destroy the conditions necessary to the existence and flourishing of non-human creatures.

Ramchandra Guha (1988) reminds the peasant movement that questions the reservation of the forest for the timber lobby and its exploitation for the elite or international market. It neither benefits livelihoods of the poor nor preserves forest for non-human. Therefore, environmental problem needs to be understood with reference to the consumption of natural resources between the rich and poor, developed and developing countries, and indeed men and women. For instance, a 27 floor building worth USD1bn for a family of four people in Mumbai (for the richest man of India), consumes water and energy equal to hundreds of ordinary citizens and the amount of waste it releases needs to be viewed from equity and sustainability perspective. An endless demand with huge purchasing capacity of the Global North (industrialised countries and the rich within developing countries) should check whether they are free to buy any amount of products by exploiting natural resources of the Global South (while preserving its own natural resource base)? It is high time to acknowledge the fact that such an attitude and behaviour does impact both the North and South at the End.

Therefore, when we apply progressive instruments like ‘Paris Agreement’ in adaptation and mitigation of the negative effects of climate change, apart from technological innovation and investment, it is imperative for human society to acknowledge that our growth and existence is determined by the life of non-humans on the planet. It is high time to restore our relationship with nature and ensure its prosperity that in-turn sustains our existence and needs. Hence, the unity of human with nature is a fundamental concept, which needs to be grasped for adaptation and mitigation of the negative effects of Climate Change. This requires a change in attitude and behaviour of the Homo sapiens toward nature and all non-human life on planet earth.
Nationally Determined Contributions (INDCs) and India’s Role in combating Climate Change

Dinesh Vyas
CASA Senior Programme Coordinator

Under the mandate of UNFCCC and resolutions passed as decision 1/CP.19 and 1/CP.20, all parties were invited to have a commitment towards a fair and ambitious mechanism to reduce the GHG emission within a specific time period and transparent process. This mechanism is called Nationally Determined Contributions (INDCs) that would help in achieving the objective mentioned under the Article 2 of the convention.

In decision 1/CP.20 it is further specified that in order to facilitate clarity, transparency and understanding, the information to be provided by Parties communicating their intended nationally determined contributions may include, as appropriate, inter alia, quantifiable information on the reference point (including, as appropriate, a base year), time frames and/or periods for implementation, scope and coverage, planning processes, assumptions and methodological approaches including those for estimating and accounting for anthropogenic greenhouse gas emissions and, as appropriate, removals, and how the Party considers that its intended nationally determined contribution is fair and ambitious, in light of its national circumstances, and how it contributes towards achieving the objective of the Convention as set out in its Article 2.[1]

India is one of the major developing country among 164 countries submitted their INDCs so far who has submitted its document to UNFCCC on October 1st of 2015 just one day before the birthday of Mahatma Gandhi, our father of nation. India has shown a great commitment to work towards the issue of Climate Justice, where it prays for global peace with a following Vedic Hymn: “Om dyauh śāntir antarikṣam śāntih prithvi śāntih āpah śāntih osadhayah śāntih” -- Yajur Veda 36.17 (Unto Heaven be Peace, Unto the Sky and the Earth be Peace, Peace be unto the Water, Unto the Herbs and Trees be Peace)[2]

India’s INDCs submission to UNFCCC says that India is committed to engaging actively in multilateral negotiations under the UNFCCC in a positive, creative and forward-looking manner. Our objective is to establish an effective, cooperative and equitable global architecture based on climate justice and the principles of Equity and Common but Differentiated Responsibilities and Respective Capabilities, under the UNFCCC[3]. This submission to UNFCCC further clarifies that India is committing its INDCs even after a more critical national circumstances, where it may be noted that no country in the world has been able to achieve a Human Development Index of 0.9 or more without an energy availability of at least 4 toe per capita. Thus, with having a more per capita carbon space/budget in hand along with a HDI of 0.586 and global rank of 135, India has a lot to do to provide a dignified life to its people and meet their rightful aspirations.

Despite having immense challenges to Growth and Development, India has realized its concerns with sustainability, as fast deteriorating ecosystem poses an environmental threat to our planet Earth. The entire policy approach of India’s INDCs reflects the Article 48-A of the constitution along with National Environment Policy (NEP)-2006, National Action Plan on Climate Change (NAPCC), State Action Plan on Climate Change (SAPCC), The Energy conservation Act, The National Policy for Farmers, National Electricity Policy and Integrated Energy Policy etc. Though India has declared a voluntary goal of reducing the emission intensity of its GDP by 20-25%, over 2005 levels, by2020 and many of policy measures were launched to achieve this goal. As a result of this already emission intensity of India’s GDP has decreased by 12% between 2005 and 2010. This is also a matter of satisfaction that United Nations Environment Programme (UNEP) has recognized already for these efforts.[4]

India’s INDCs submission to UNFCCC has not only mentioned its Mitigation and Adaptation Strategies but it has also communicated following INDCs to UNFCCC which has fair combination of Mitigation as well as Adaptation commitments on behalf of India:

1. To put forward and further propagate a healthy and sustainable way of living based on traditions and values of conservation and moderation.

2. To adopt a climate friendly and a cleaner path than the one followed hitherto by others at corresponding level of economic development.

3. To reduce the emissions intensity of its GDP by 33 to 35 percent by 2030 from 2005 level.

4. To achieve about 40 percent cumulative electric power installed capacity from non-fossil fuel based energy resources by 2030 with the help of transfer of technology and low cost international finance including from Green Climate Fund (GCF).

5. To create an additional carbon sink of 2.5 to 3 billion tonnes of CO2 equivalent through additional forest and tree cover by 2030.

6. To better adapt to climate change by enhancing investments in development programmes in sectors vulnerable to climate change, particularly agriculture, water resources, Himalayan region, coastal regions, health and disaster management.

India’s has already planed a detailed means of implementation for its INDCs but the successful implementation depends upon ambitious global agreement and additional means of implementation to be provided by developed country parties including Technology Transfer and Capacity Building following Article 3.1 and 4.7 of the Convention.[5]
“I would expect the negotiators to work really hard because we should not miss this chance in Paris. Otherwise we will be heading towards the doomed world.

The analyses have to be much deeper – Is this right? Otherwise why are we so worried? Why we are saying this is the last chance? I mean there has to be a reason to why we are saying this is the last chance?

The day we handed over the 2 million signatures from all around the world – that is the power. We can move people. I think if we being faith-based alliances and network and we are able to move the UN members - I think that is what the faith-based alliances can do. But we also have to recognise that we are not working in the air. Our rootedness is with community who are suffering the most all around the world.

I think we have to also recognise the role which the contributing agency has played in the alliance as well as the implementing agency because our commitment is to the life. And our commitment is to the creation. This is very important for the faith-based organisations. And I believe that ACT Alliance should continue to concentrate that life is more important. Therefore, we have to continue to work for life and continue to being a good steward to take care of this planet.”

So, the fishermen and the coastal communities would be first to be impacted across the world. These communities will have to move inland, and once they move inland there will be an increased pressure on the inland areas.

There is already a pressure of land availability due to increased population of this country. Currently even the prime agricultural land is being converted for industrial and residential purposes. So the pressure will definitely increase in the near future.

The alternatives that we will be left with will be using agricultural land and cutting forest for more settlements which are not at all viable or sustainable alternatives. This is one of the major challenges.

The second big challenge is going to be finding appropriate livelihood for the displaced climate refugees from the coastal regions. Even if they continue to mould themselves to adapt to newer livelihoods, it is not going to be easy. There is always a deficit of jobs, and when we take the whole population in consideration, the deficit will go up in the future. The coastal communities are going to face a very difficult time adjusting to new livelihoods and shelters.

The third biggest problem that we will be facing in future will be related to conflicts. Conflicts will arise on habitations, drinking water and job opportunity fronts. Relocation in such situations will always result in conflicts which will be difficult to manage. Previously we could predict the landslides and the seasonal floods, but now it is very difficult due to change in temperature, heat cycle, precipitation among other factors. Places like Kashmir which were not considered vulnerable to floods or landslides are not falling into vulnerable zones.”
The time to act is now! 
Faith groups all over the world call for climate action

Mattias Söderberg
Manager of the ACTalliance
Advocacy Academy

We are all part of God’s creation, and we all have a responsibility to care for it. For Christians and other faith, groups global warming and alarm bells from science are of great concern. We have a wonderful earth and God has asked us to care for it. Clearly, we have not lived up to our task, and it is now time to take action.

ACT ALLIANCE AND CLIMATE CHANGE

ACT Alliance is a global alliance of churches, church based development NGOs, and for us climate change is not just a trendy word, and or a theoretic concept. It is real. ACT members, like CASA in India, and DanChurchAid face the effects of global warming on a daily basis.

In our relief work, we help and support poor and vulnerable people who feel the consequences of climate change. We saw it in 2013 when typhoon Haiyan hit the Philippines affecting millions of people who were in urgent need of help and support to survive. However, it is also slow onset disasters, like drought in Darfur, Sudan. The direct reason people are forced to leave their homes in Darfur are most likely the conflict, which has been going on for many years. However, the country is also deeply affected by climate change, and continuous droughts is likely to be one of the drivers behind the conflict, as food shortage put pressure on vulnerable communities.

As ACT members, we are also standing together with poor and vulnerable communities when the flood is over, and when rain has put an end to endless droughts. Through our long-term development work, we help people to rebuild their livelihoods, and to strengthen their resilience. We help communities to adapt to the effects of climate change so that smallholders and fishermen, can stand, also when the strongest cyclone goes ashore in Bangladesh.

Still, if we want to follow the call from God, to care for the creation, it is not enough to adapt to the effects of climate change. No, we must also enter the path, towards green transformation, and sustainable development. The future must not be based on fossil fuels, and other greenhouse gasses. No, on the contrary, we need to switch to a low carbon development, and explore new ways to live, based on a circular approach. This is also a challenge many ACT members take seriously, and when we help farmers with irrigation, we ensure that the pumps run on renewable energy, instead of an old diesel generator.

However, even if projects on the ground are important, and have a positive and successful effect, it will not be enough. There is also need for political action, and changed structures, policies and activities by nations and states. This is acknowledged by ACT members around the world, who therefore join hands in a strong global call for political action.

Through advocacy activities, including campaigning and active dialog with policy makers, ACT members try to push political ambition upwards, thus generating climate action on a national or even global scale. The potential of being a global alliance is big. We can coordinate our advocacy actions, and reach out to all parts of the world. As faith based movement, we have a high degree of trust, and with our dialog approach, many governments are interested to listen to our proposals.

UN CLIMATE TALKS

For several years, ACT has focused on the UN climate talks, which constitute an important platform for governments to make agreements about global climate collaboration. Climate change has been on the UN agenda since early 1990s. In the beginning, these talks were mainly a concern for environmentalists, and they received limited attention in media, as well as in national politics. However, the climate summit in 2007, in Bali, was a game changer.

New scientific reports, and an increased public awareness of the risks associated with global warming put climate change on top of the political agenda. Suddenly climate change was not only an environmental topic. It was equally important for growth, trade, health, agriculture, transport, energy, and security. Suddenly climate change was discussed in all parts of the national governments, and a number of different concerns, coming from various ministries, were brought forward.

The good and important conclusion from Bali was that climate change is a global threat, and that it must be dealt with through global cooperation. All countries must do their fair part. But the new
complexity of the talks made it difficult to move forward. Yes, there was a common concern about the effects of climate change, but ministers of finance raised a concern about possible effects on growth, employment, export and development if the use of fossil fuel suddenly were to be reduced. Ministers of agriculture on the other hand, started to see a potential internal conflict, as their sector generate big emissions, at the same time as it becomes more and more vulnerable due to the effects of climate change.

UN climate talks had many ups and downs, but in 2015, finally, a global agreement was signed in Paris. The Paris climate agreement provides a solid base for joint climate action.

Firstly, it is global, meaning that all countries will work together to solve a global problem. Obviously, the responsibility for global warming, of different countries, as well as their respective capabilities to take action, differs. However, the agreement acknowledge that we all need to take action, and that we have to work together.

Secondly, it address all the main elements of the climate debate. That includes: 1) Mitigation, i.e. how we can reduce our emissions and in the long perspective end global warming. 2) Adaptation, i.e. how we can adapt to the inevitable effects of climate change, so that we can continue to live and develop in a climate constraint world. 3) Loss and damage, i.e. how to deal with situations where it no longer is possible to adapt, where livelihoods are lost or damaged. And 4) Means of implementation, i.e. financial and technological support to developing countries, to help them with a transition to green, sustainable and resilient future.

Thirdly, and equally important, the Paris agreement includes an “ambition mechanism”. The current level of ambition, meaning the climate action governments have committed to do in their countries, is far too low. If nothing more than the existing plans are implemented, global temperature will rise far beyond the limits recommended by science. This is acknowledged in the Paris agreement, and therefore a so called “global stock take” will take place every five year, to evaluate the situation, and to facilitate initiatives to scale up ambition on country level.

**CLIMATE JUSTICE**

However, while we celebrate the Paris agreement, we should also look at the reality. The reality is that poor and vulnerable people around the world, including India, suffer. At the same time, we know that the risks associated with climate change is increasing due to emissions from for example the energy sector, agriculture and transport. It would thus be most fair if those who have the biggest emissions also pay the biggest bill. But how do we define fairness?

This is the core of the UN climate talks, and one of the topics where ACT alliance have raised its concern. However, while the need for justice and a fair division of work is easy to understand, the reality makes it difficult to turn into practice. All governments are concerned with growth and development of their own counties, and traditional growth strategies are interlinked with increased emissions. Thus, all governments will try to push responsibilities onwards to other countries.

As a result, negotiations tend to deliver many loopholes, where countries can find arguments to limit their own contribution. Developed countries agree that they have a big responsibility, including support to developing countries, but they do not want this commitment to hinder domestic growth. Emerging economies see the need for action, but are also concerned that drastic changes may challenge their current growth rates. Why should they hold back now, when the old industrialized countries have had a low cost fossil-based developed path for centuries?

Finally, the most poor and vulnerable countries, they have nothing to offer, as their emissions already are small. However, they are currently paying the highest price as people die, and are being displaced due to the effects of climate change. It is not surprising it is difficult to agree on how to share the efforts related to climate action.

**WE HAVE FAITH**

But the future is bright. We have faith! This is a slogan used by many ACT members. As faith based organizations, we believe in humanity. We acknowledge that the situation is critical, but we believe that our current course can be changed and that we can do something about it.

And recent news, seems to support our belief. In spite of a new climate sceptic administration in the US, there seems to be optimism around the world. Renewable energy solutions are now becoming a more profitable solution than old fossil fuel based technologies, and the political commitment to take action is growing.

Yet, while there are positive signs when we talk about energy, and sustainable development, poor and vulnerable people are still at risk of being left behind. They often lack capacity to cope with droughts and flooding, and they may not even have access to energy, not fossil based nor renewable. There is an urgent need to mobilize support to these communities, and to ensure that they also benefit from solutions, which can support both adaptation and mitigation measures.

And this is the key message from the ACT alliance. We should leave no one behind. The future is green, sustainable and resilient. This is the development path we all need to choose. We have faith!
1) Why you think local fundraising is important for an organisation like CASA, in India?

Fundraising is extremely important for an organisation’s success. According to New World Wealth Report 2016, India ranked 7th wealthiest country of the world, ahead of countries like Canada, Australia and Italy. There is a growing pressure from the international community's for country like India, to handle the developmental problems from local resources.

Fundraising is required for survival and expansion and development of an organisation. Local fundraising helps reducing dependency on few major donors and thus avoid any financial crisis. Through local individual fundraising, an organisation like CASA can build a constituency, who will be taking care of causes on which CASA works, to handle the developmental problems from local resources.

2) Do you think the scope of individual fundraising is growing in India?

Yes, scope of individual fundraising is growing in India. There are several reasons for this.

India is one of the fastest growing economy. With second largest population and rapid economic growth, India will soon be powerhouse of middle class in the World. According to a EY Report, India’s global middle class would reach to 200 million by 2020. Additional advantage with India is, that we have the highest youth population, as per a UN Report. And thus, we would be adding more people than the Chinese to the global middle class worldwide after 2027. Higher the number of middle and upper middle class would mean higher the scope of having individual supporters.

Another aspect which is important for individual fundraising is use of technology. India is the world’s largest sourcing destination for the information technology (IT) industry in the world. It’s also fastest growing in terms of use of technology. Digital transactions are increasing and thus, scope of digital fundraising too.

Third and most important is, increasing awareness about developmental issues. One of the major source is social media. According to one of TECHINASIA Report, India with 462 million active internet users, is among the top five countries in the world when it comes to the pace of growth in internet users. It also has 153 million active social media accounts and 1.01 billion mobile connections. Organisations are increasingly using social media to share and engage individuals in their development work and all this, would translate into individual fundraising.

3) What are the challenges that you face in the fundraising sector?

Fundraising is never easy. Unlike in Northern countries, there are some particular challenges of individual fundraising for countries like India. These include:

a. The development of Fundraising: Fundraising here is not as developed as it is in the North. Indian Fundraisers has to help in developing the habit of giving, finding fundraising methods which work well within the local culture, and identifying and mobilizing those constituencies of support that we would like to tap.

b. Growing Needs: We have underfunded health, welfare and educational programmes, which affects poor people. According to a New World Wealth Report, India is second most unequal country in the world. Thus, with wealth not trickling down to the marginalised, there are new needs and new concerns arising. It’s important to find solutions rather than just providing services that improves the quality of life. With growing needs, the challenge for a fundraiser is to find funds to make this happen.

c. Competition: The fundraising world is extremely competitive. More organisation than ever are thinking about fundraising and beginning to develop independent sources of income for themselves. Also, there are large international networks, such as HelpAge International, who may have developed far better resourced local fundraising. There are also international development agencies India, such as, PLAN or Oxfam, who in addition to local fundraising, seeking to access grants locally from international donors. There are also new organisations, full of energy
and enthusiasm. Thus, one has to prove that they are the best recipient for the donor's funds before they get sign-ups.

d. Non-availability of good fundraisers: There is a very limited awareness about fundraising as a career amongst young people. Limited education and training opportunities and low tolerance (given the highly competitive market for fundraisers, this group is very mobile, especially now, given the more lucrative CSR roles in the corporate sector), lays big challenge on getting trained fundraisers, working over 2-3 years with one organisation.

4) What is your strategy for fundraising for an NGO like CASA which is new in this sector?

My strategy for fundraising for an NGO like CASA, is focussed on "Relationship Fundraising".

Fundraising is a long term process and our focus is to develop a strong supporter base for CASA. Thus, we started with individual fundraising, so that we could reach out to as many people as possible and explain them what CASA does? and how in the last 70 years, CASA has been able to bring in a change in the most marginalised and under-privilege communities in India? Those individuals, who do not want to sign-up as donors, we give them a give-away that helps them experience, lifestyle of communities that CASA works with, with a hope that someday, they would support. For those, who do, we give them too a gift from community to help build a bond with the communities, that CASA works with. It's just six months, when CASA started individual fundraising.

In future, we plan to build in stronger bonds between the donors and the communities that they support through some regular communications and methods of caring and sharing for each other. Thus, the tag line that we use in LRM is, “People Helping People”

Our fundraisers are tech-savvy and they use tabs to show video of our work and stories of communities on how CASA made a difference. This helps in making both fundraising and donors, help doors believe that their every hard earned money would be spent for a cause they support. Honesty as a value we practise at the highest amongst our fundraisers.

Our other strategy is to engage our donors in CASA's work. We plan to have volunteers programs, donor visits to CASA's work, and engage them through other initiatives like campaign. We release monthly e-newsletters, which also has thoughts and experiences of the donors. We use social media including face book, twitter and you tube to further engage donors and their friends and colleagues.

In India, where inequality prevails to such a high extent, through our fundraising initiative too, we would like to bring two Indias- the India, rich people and the Bharat, poor and marginalised; at one platform so that there is regular caring and sharing, and everyone leads a life of dignity.

Visit casa-india.org and donate to improve the lives of suffering people.
NASA has released 11 terabytes of data predicting temperature and rainfall.

- It allows scientists to predict climate change for individual towns and cities.
- A map released by NASA shows large areas in July 2100 will exceed 45°C.