8th FCN Meeting on 10 & 11 April 2017 – Keynote Address

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Friends:

It has been some time since we formally met as a Network in November 2010. The two score and more times we did meet these past 6½ years was for specific purposes. In these meetings, and the heavy work done in dozens of project sites, we have achieved quite a lot.

- 16 Climate Projects are under implementation and a dozen registered projects are awaiting ERPAs. An all India Energy PoA, along with 3 CPAs, has been registered. 5 NGOs are doggedly pursuing Low Carbon Farming.
- Fair Climate Services, the company my colleagues and I run to provide technical support has provided invaluable to Client NGOs and Carbon Investors alike.
 A methodology has been developed and is waiting to be used for Low Carbon Farming.
- We developed a collaborative, exponential, digital and combinatorial Business Plan that formed the basis to develop a benevolent market mechanism for CERs/VERs generated by poor families, following the FCN principle of selling *yet-to-be-generated* Carbon Credits at the *actual-cost-of-production*:
 - Our arrangement with IndiGo, India's largest domestic airline, has already contributed ₹ 12.9 crore (34%) of the ₹ 38.2 core they will provide to assist 14,500 women adapt to climate change in 3 locations.
 - We are on the brink of an agreement with a Corporate group to sell 21 lakh CERs, over the next 10 years, at an average price of ₹ 1,151
 - Government may enter a PPP with the FCN to assist 40,000 households switch from LPG to Biogas in Champaran district, Bihar.

When I asked my brother what I should say in this Keynote address, Mario was quick to respond, "Just tell them that Climate Change is a serious issue!".

I started putting together all the truisms that every one of us is aware of. My first realisation was that there are no Climate Deniers in today's world (Trump being the exception that proves my point). So that could not be the reason why there is such a *blasé* attitude towards climate change. Then why is it always relegated to page 13 of newspapers, even when news of uncanny weather patterns that are so improbable, hit the headlines? Why was COP22, Marrakech, not even reported in newspapers and TV channels? Not that what is printed in newspapers and aired on TV channels really matters when 85% of the population's only source of information is WhatsApp and Facebook.

Perhaps it is because our minds are tuned to fragment every problem and solve them linearly, one after the other – the "project approach". We see only sectoral lapses and make piecemeal attempts at successive responses, one after the other:

- Higher embankments, stronger dykes, greater fuel efficiency, stricter emission standards, flyovers, bypasses, underpasses, dams and canals, deeper tube wells and targeted irrigation at a policy level;
- Air conditioners, room heaters, LED lighting, face masks and water purifiers at the individual level.

Climate change is caused by dramatic changes in the mode of production and volume of consumption over the past 150 years. The economy doesn't function through the operation of just a single law governing social sciences. Nor does it grow due to any single technology, however far reaching it may

be. Therefore, it requires a holistic intermixing of socio-economic, political and cultural disciplines, as well as technical knowledge to *comprehend* climate change. It needs a well-orchestrated intertwining of different skillsets and cutting edge technology, to *respond* to climate change. It demands not just information be obtained, but facts be faced. This last is not as simple as it sounds when *Homo sapiens* are driven by diverse subjective and fictitious realities layered on top of our objective reality.

Unfortunately, we Humans are tuned to identify and respond to sectoral lapses. This is where business comes into the equation. New age business –indeed the only type that will succeed in today's world– reverses the "project approach" and associated mind-set.

Business is never unidimensional, even when it appears that a company makes only cars or tea sets. Entrepreneurs need to know everything about everything before they take the plunge to mortgage their future. It's not enough to just know the taste and preference of customers vis-à-vis a product. Without a multifaceted understanding of the interplay of *all the forces* in society, business will soon run aground.

This is the reason why concepts of "customer" are being replaced by "client", "medicine" by "health care", "selling" by "servicing", "workforce" by "human capital" and "staff" by "secondary stakeholder". These are not just changes in terminology. They represent a change in mind-sets of leaders and managers.

Business is rewarded by Results and effort often goes unrecognised. But Results cannot be obtained without a reengineering of processes within which efforts are contained. Here lies the challenge and ingenuity of business leaders and managers.

For many among us gathered here, climate change is just a snazzy catchword and an opportunity to offset diminishing church funds with an exponential increase in project revenues. So be it. We have never been *naïve* in our reading of NGO motives. The Fair Climate Network makes no claim to monastic self-denial. We don't couch our work in politically acceptable terminology like social business, not-for-profits, etc. We embrace the market mechanism as the only workable solution that can operate at the scale demanded by the problem. We pass no moral judgement on development workers engaging in business. Provided it is an *informed* decision guided by *enlightened* self-interest.

Grassroots NGOs need to treat climate actions as new age businesses that primarily satisfy End User women who face acute adaptation challenges. Alongside, they should ensure timely delivery of Carbon Offsets to investors who are in the game for win-win reasons of their own.

If the objective and subjective conditions are not conducive to achieve these 2 objectives, the venture should not be undertaken. Manil, Malla Reddy and I cannot cite drought as a reason for underperformance and shortages in deliveries. After all, we have been around for 3-4 decades and should have anticipated the advent of catastrophic climate change that was staring us in the face. We should not have pretended that there is enough biomass to support biogas. (In my own case, for example, the first Biogas CDM Project delivered only 84% of committed CERs these past 3 years. Our second Biogas CDM project performed at a more dismal 52%)

Climate needs to be mainstreamed in our sector – just like Human rights, gender, etc. The climate rationale behind all and every action we undertake needs to be critically examined. Everything we do should aim at preserving the continued existence of *Homo sapiens* on planet Earth. Climate projects should not become just one more set of activities to implement, and books of accounts to maintain.

I've facilitated 250 of your field staff to learn about climate change and place it in a larger socioeconomic, cultural and historic framework. They've all understood that climate change can be summed up in just 2 words: Unpredictable Weather.

They know that, over the years, climate changed *gradually* and Humans adapted to these changes *over time*. It is when there were sudden changes in the weather, year to year, that farmers, traders, crafts persons, service providers and just about everyone engaged in any economic activity were at a loss. Abrupt climate change did occur from time to time in the form of cyclic droughts, occasional thunderstorms and flash floods, cyclones and tidal waves. People braved those bad years with naked resilience and moved on.

Catastrophic climate change is something totally different. It is the sudden and topsy-turvy disarray in weather conditions that people have lately been witnessing. Some years back, this may have sounded like doomsday prediction or, at worst, a passing phase or temporary phenomenon; viewed as a heaven-sent punishment for some real or perceived collective sin. Today, it appears that the words "weather" and "pattern" can no longer be used together.

But most important of all, and of this I am particularly proud, I have given your field staff a glimpse of the organisational setup, work environment and social capital needed to respond to global warming in an effective manner. It is now up to NGO leaders and managers to meet their expectations without trying to pour old wine into new bottles.

Let me now address a more learned and sophisticated reason why such a relegation takes place. It comes from Science Pundits who assure themselves that technology will provide solutions to problems that every generation thought was insurmountable. Basically, I agree with this assertion. With the scientific revolution, 500 years ago, *Homo sapiens* changed their entire worldview when they began to say, "We don't know". That humble acceptance of ignorance changed the course of our history. It spawned a thirst for knowledge and answers that just could not be quenched by staying idle. We could no longer pretend that the texts and scriptures had answers to everything worth knowing. 300 years later, it catapulted the Industrial Revolution and more recently, 30 years back, the Second Machine Age.

So yes, in the very near future, historically speaking, we will find that inexhaustible stock of zero cost Energy. Extractive economies that exhaust finite stocks of fossils will be relegated to a dark and bygone age. Our plant and animal ancestors, including our literal parents and grandparents, will finally rest in peace.

But climate change is a little more than greedy plunder and fossil extraction. This 17 kms of air above us is where the Weather is manufactured. It houses the most fabulous of all machines and mechanisms that Nature has ever created, I dare say, in the entire universe! The broad outlines of this apparatus are visible to the naked eye in the form of wind, clouds, steam, precipitation, seasons, ocean currents, storms, *et al.* Its more intricate working —the gears, levers, pistons and pumps— are revealed to us in minute detail through the universal laws of physics.

To me, personally, the Weather mechanism is a taunt and a challenge that Humans dare not accept. It is as if Nature is saying, "Here is the design, the blueprint, the list of materials, and the physics behind it all. Now see if you can match it!"

It is this Weather Mechanism that is shutting down due to global warming. Halting the extraction of fossil fuels by finding other sources of Energy and stopping the further conversion of Fixed Carbon

¹ This stands to reason when only a tiny proportion of the Sun's energy reaches us, and yet it amounts to 3,766,800 exajoules each year. Plants capture about 3,000 of these and Human activities and industry another 500 exajoules annually.

into Free Carbon, is not going to fix things. It's not just the IPCC that has declared that we've crossed the tipping point. It is evident to everyone who is not blind. This month, we have reached a GHG concentration of 410 PPM - 191.7 Gigatonnes over and above the limit.

So the next dilemma that our Science Pundits will face is, "Who will use this abundant zero cost Energy in a windless, cloudless, rainless, landless planet where nothing moves?" The only response I have is President Obama's, "C'mon, Man!"

One of the latest advancements in Science is de-extinction (no, not in the sets of Jurassic Park). DNA is used to bring back species that Humans have wantonly destroyed. My question is about those millions of species that we don't even know about; haven't even categorised. How and where do we identify their DNA and de-extinctionise when we are unaware of their existence and the role these organisms and microorganisms played in the food chain? And then there is talk of shooting upside down umbrellas into the stratosphere to deflect the sun's rays...

No amount of knowledge, information, data and analysis gives me answers to deep and troubling questions. Often times, when I take off my narrow blinkers, I wonder if it is all worth it.

- The total GHG reduction required to stabilise the weather mechanism is 191.7 Gigatonnes. The total CERs issued by all CDM Projects in the past 12 years is just 1.7 Gigatonnes. Even a 113-fold increase in CDM efforts will just <u>maintain</u> the Greenhouse Gas levels not reduce the concentration by a single gram. Emission "Reduction" is a euphemism designed to make us feel good.
- The arithmetic is the same with ESD efforts to make "Real reductions" through clean-up technologies.

Facts tell me that we have crossed the tipping point and nothing we do can save our species from extinction. Science doesn't convince me one little bit, ever since it entered the realm of wild fantasy and conjecture. Planet Earth, on the other hand, will rejuvenate herself since atmospheric methane, one of the most potent Greenhouse Gases, has a lifespan of a little over 10 years in the troposphere, and about 120 years in the next layer – stratosphere.

That's when I try to find solace in history. *Homo sapiens* distinguish themselves by their ability to cooperate in large numbers. Our closest animal cousins have just 50 fellow individuals they can know and trust (under exceptional cases this number reaches a maximum of 150). Humans, on the other hand, are bonded with crores of fellow *Homo sapiens* by various shared ideologies. If these ideologies can make 2.1 billion utter strangers bond together to scream "*Allah ho Akbar!*", or lakhs of divergent people who have never met find common cause to build *Ram Mandir*, or 7.4 billion people believe in the fiction of *Money/Currency*, can a shared concern to maintain climate integrity do the same?

Do only fictitious worlds of subjective constructs hold sway over *Homo sapiens*? Cannot objective realities bind us to undertake constructive actions that assure the long-term existence of our species?

Moore's law operates due to the ingenuity of the Human mind. Every attempt to disprove it has failed by underestimating the next generation's ability to fidget, invent and innovate within the boundaries of physics. How I wish this economic law also operates outside the digital world...

Had I known the answers, or even *pretended* to know, I would not have attended this FCN meeting, let alone stand here to welcome you! My expectation from our gathering is that, for the next 2 days, we find the rationale to continue our 11-year struggle that started in September 2007, to advance the local environmental take on climate change.

I thank you every one of you who took the time and trouble to come here!