# Nature's Solutions as National Policy - Saturday June 5th, with Walter Jehne, Vijay Kumar, and Rep. Chellie Pingree - Chat and Resources

## Conference Chat:

00:58:56 Mary Gilbert: In Vijay's talk there is not mention of opposition from agribusiness. Is there less agribusiness domination in India than in the U.S.?

01:01:07 Jenny Goldie: Is there significant population growth in the state? If farms are less than 2h, it makes it difficult to further sub-divide if a farmer has a lot of children.

01:01:51 Dita Brigid Vizoso / Nomad UK: Such a beautiful realisation of what may look like a miracle. Thank you Vijay and all the people making that happen!

01:03:31 Jenny Goldie: With a minimum of 8 crops on each farm, where do the seeds/seedlings come from in the first place? Do they cost much?

01:07:34 Jenny Goldie: Does natural farming work in the semi-arid areas of the state? Is there a cut off point in terms of rainfall below which NF doesn't work?

01:08:37 Eliane Ubalijoro: Natural farming is even more urgently needed in semi-arid areas. Results there are actually more dramatic.

01:08:44 ajoy pavan koppolu: What is the effect of this marvelous progress in AP on other states and on other governments in India?

01:09:29 ajoy pavan koppolu: Is there a way to package the 'natural' fertilizerso it can be sold as a commodity to farmers everywhere?

01:10:41 Dita Brigid Vizoso / Nomad UK: Ajoy, I think a better thing is for the farmers everywhere to make their own preparates. The local ingredients will also, in my view, be better suited for the locality.

01:10:53 Virginia Richter: And that resiliency happened FAST!

01:11:55 Jenny Goldie: A lot of western farmers, especially women, are not prepared to mix up cow manure, cow urine and good soil, especially with their bare hands! Small solar powered machines might be needed!

01:12:09 ajoy pavan koppolu: True, Dita!

01:12:20 Virginia Richter: There are examples of this same miracle all over the world. (Gabe Brown)

01:12:58 Vijay kumar Thallam: @Virginia, I agree with you. I have been inspired by Gabe Brown

01:13:09 Vijay kumar Thallam: And other amazing farmers in USA

01:13:21 Virginia Richter: Yes!

01:13:42 Vijay kumar Thallam: The principles that we are following are universal - applicable to all countries

01:14:08 Dita Brigid Vizoso / Nomad UK: Jenny, I think a change in our relationship with nature and its elements is crucial. The recipes and processes are, in my view, going to be useless if we do not change our personal relationship with the rest of nature. We need to stop thinking that we are separate from cow dung... (personally, I find it a beautiful substance, if the cows are not chemically burdened).

01:15:19 Dita Brigid Vizoso / Nomad UK: Jenny, what about a stick? No need to touch the preparate with bare hands...

01:15:31 Virginia Richter: Agreed, but 5 years ago we were told we had 10 years to cool the earth. That's the primary and most important goal.

01:17:37 inky stainsworth: omg Chellie, you are my HERO! a true WONDER WOMAN!

01:17:39 Srikanth Thoram: Growing crops naturally is one thing. Selling the produce in the Indian market is an altogether different challenge, given the inefficient post harvest infrastructure. How can natural farmers gain competitive advantage over other farmers who grow crops using chemicals? Is Andhra Pradesh working on improving food processing infrastructure at the local level?

01:21:00 ajoy pavan koppolu: Good point Srikanth! For starters, we should take away subsidies given to fertilizers in a phased manner. But that's easier said than done!

01:21:30 Dita Brigid Vizoso / Nomad UK: And CO2 is just a small part of the Biosphere

Crisis... Planting trees only addresses a fraction of the problems around that all-encompassing crisis.

01:21:49 Mary Gilbert: Do you think the state-by-state growth of soil health legislation is crucial to acceptance of any federal legislation?

01:22:58 Virginia Richter: Lowering GHG and changing to renewables is a long term goal and will do nothing to cool the planet. But that's almost the only thing talked about.

01:23:31 Karen Merriam: Great point, Virginia.

01:24:25 Jenny Goldie: You're wrong Virginia. Reducing GHG is absolutely critical but it is not at odds with Natural Farming. They are complementary.

01:27:13 Deane Coady: A good USDA grant application right now: Community Composting and Food Recovery! Brookline MA DPW applying. promotes municipal composting growth.

01:27:36 Lynne: Wow, this is one of the best groups of speakers pulled together. I am so grateful for this presentation. So empowering. Especially glad for congresswoman Chellie Pingree who understands the importance of regenerative farming. Thank you.

01:27:45 Vineet: AP has really done well in implementing Natural farming and getting good produce. As I see this needs a good amount of manhours and human physical involvement (man power). How can natural farming be implemented in states like Telangana where there are difficulties in Man power?

01:28:03 Katie Bergh: More information about the Agriculture Resilience Act can be found here: <u>https://pingree.house.gov/netzeroagriculture/</u>

01:28:25 Maiyim Baron: Glad to read this about Brookline Deane. Go our great town!

01:28:58 Virginia Richter: Jenny, check out Walter's videos on the water cycle and also Christine Jones and Elaine Ingham are clear about what is causing the warming.

01:29:37 Deane Coady: Mothers Out Front, environmental group of mothers, grandmothers and others fighting for a livable climate! Brookline chapter helping the DPW apply for the grant.

01:33:04 Virginia Richter: Support farmers during the 3 or so years it takes to change from industrial agriculture to regenerative. Also support of all the consultants/teachers needed in this transition.

01:35:42 Lynne: I like the idea of the hydrological cycle being so important to the CO2 numbers regarding heat dynamics. I can liken it to a donor match in fundraising, most folks understand that, and now I can explain this concept better to others. Regenerating the Earth's soil sponge is critical and we have the tools to do it. We need practical ideas, and this presentation and the proof from Vijay Kumar Thallam that it can be done is awesome. Hearing Chellie Pingree talk about all her efforts to promote natural regenerative practices gives me so much hope that we really can move the needle in this country.

01:35:58 Paula Phipps: Dave Chapman at the Real Organic Project reported on a recent meeting with Tom Vilsack, and reports that Vilsack says the OMB (Office of Mgt & Budget) is a major roadblock to redirecting subsidies. Are there leverage points there?

01:38:33 Dita Brigid Vizoso / Nomad UK: Personally, I believe that subsidies will keep on preventing real transformation... access to land and real wealth and health seems much more regenerative and resilient. Dependence on subsidies also breeds the likelihood of the farmers changing their practices if a different subsidy or financial incentive comes along.

01:39:26 inky stainsworth: I have tears of hope right now after hearing all of these great opportunities laid out so eloquently by you!

01:40:07 Dita Brigid Vizoso / Nomad UK: Amazing work, Chellie! What possibilities do you see of changing land access/ownership policies at a national level? Community-stewarded land and smallest-scale farming have been showing great promise for soil health. But it seems to collide with the profit-oriented economic and political systems, and the mainstream pyramid of land distribution. How is that dealt with in your bill?

And perhaps in a more general way, how do we bridge that without totally overturning the system? Do we need to keep a system based on inequality? Or would it be more efficient for the regeneration of the soil sponge to just let that system collapse?

01:40:46 Jenny Goldie: Chellie's work is most remarkable. She is an inspiration.

01:42:36 Maya Dutta: How can we tie together some of the policy mechanisms Chellie brought up (insurance and subsidies, research support, legislation, etc.), Vijay's practical experience working with government (and the policy measures involved in Andhra Pradesh Community Managed Natural Farming movement's success), and Walter's recommendations on climate action?

01:43:33 ajoy pavan koppolu: It is important to use social media to showcase the success stories from AP to other states in local languages.

01:43:55 Virginia Richter: Does it come from the air in the form of dew?

01:44:38 Virginia Richter: What is the mechanism for harvesting water from the air?

01:46:02 Dita Brigid Vizoso / Nomad UK: Part of it is water produced by respiration of the microorganisms in the soil. A healthy, living soil produces water.

01:46:05 Latha David: Brilliant discussion. Hope we can use the model not only in all the Indian states, but also globally!

01:48:54 Karen Merriam: Will the UN Decade On Restoration be an avenue to advance these critical practices and mindset changes?

01:49:05 Maya Dutta: How do we, through policy, support farmers at the end of their tether that you mention Chellie? Vijay, how was this done in Andhra Pradesh, where natural farming came in as a solution to farmers' dire livelihoods there?

01:50:20 Jenny Goldie: We need BOTH renewables and regenerative farming to cure climate change.

01:50:49 Virginia Richter: Does the US have a 4/1000 policy? I think I know the answer..

01:51:31 Sarah J: The new US gov. administration shows signs of supporting reg. agriculture. But a big focus is on measurement of soil carbon which is complicated - and so focus may change to high tech carbon sequestering techniques. How can our gov. be persuaded to base regen ag policy on other than metrics? How does Walter J. think this can happen?

01:51:42 Kevin Maher: Policy is obviously a huge lever but there are many entrenched interests that will slow it down. Research is also very important but the science we have

now is clear on the promise of the soil carbon sponge. Our focus now needs to be on real world implementation. To that end I believe we need experimentation with business models that partner proven practitioners, farmers and new farmers, and investment capital. As Vijay has shown the production can be equal or greater with natural practices vs. chemical/industrial approaches and do so at lower cost. That is the basis for a business model that benefits the producer. I'm working on this in the northeast of the United States through agroforestry and perennial crops. If anybody would like to explore our approach to implementing this natural solutions through a business/investment approach that focuses on action please explore <u>CrannMorAdvisors.com</u> or reach out to me https://www.linkedin.com/in/kevin-maher-30b2873b/

01:52:07 Dita Brigid Vizoso / Nomad UK: I like that, Jenny! I like to say that we're in need of "and" strategies... there's not time for "or" :)

01:52:48 Maya Dutta: In political systems that rotate leadership every few years, how do we accomplish restoration goals with these long-term benefits in cases when they oppose short term profit incentives?

01:53:08 Maya Dutta: Question for Vijay - in your experience, what does it take to get the government support for regenerative initiatives, especially if they are accustomed to existing chemical and industrial methods?

01:53:31 nancyderen: Chellie— do you see promise in the America the Beautiful cross work coordination between Ag, Interior, etc. instead of silos of each agency? How do you see that forwarding these practical and interdependent solutions?

01:53:59 Christopher Haines: Dew Ponds, Also a Living Building Project on the dry side of Hawaii provided all its water from the air.

01:55:48 Virginia Richter: Please publish this explanation

01:56:20 Maya Dutta: Thanks for this clear explanation, Walter - brilliantly done

01:58:44 Maya Dutta: Chellie, what are your thoughts on a conservation corps of young people in the US to provide some of the manpower needed for regenerative farming, for coastal ecosystem restoration, etc? Do you think there could be congressional (or bipartisan) support for such an initiative? (Perhaps this can fuel Walter's idea of a rehydration demonstration of 1 million hectares)

02:00:11 Catherine LeBlanc: Yes Maya, concern conservation corps will do current forest management projects

02:00:20 Panthangi Rambabu: Walter video https://youtu.be/A-TghzEPPVE

02:01:01 ajoy pavan koppolu: A country like the US should publish or 'sell' regenerative or natural farming widely.

02:02:35 Randy Anway: If there are existing examples in the southwest (eg private), is there a role for public-private partnerships for investigating and demonstrating beneficial practices and effects?

02:03:26 Panthangi Rambabu: https://youtu.be/5z1AfUbJh\_w Walter lecture

02:03:38 Robert Rak: Chellie, Vijay and Walter, Can we work with tribal reservations as a means of demonstrating the practices as Walter has expressed? The Native American reservations were not the best lands and they may not have the political turnovers that we see in our government. Since they are sovereign nations there may be more flexibility in their ability to apply these techniques.

02:04:17 Kevin Maher: @Randy Anway, yes there are interesting private examples of this being done to great effect and profitability.

02:07:13 Vijay kumar Thallam: There have been wonderful comments from all of you on the chat box. A big thanks to all of you.

02:08:22 Virginia Richter: Put money into changing practices, we don't need more research, certainly not bench research. We already know how to change the world

02:08:43 Karen Merriam: Thank you Chellie, Vijay, Walter, and Adam for this profound and inspiring presentation and discussion.

02:09:09 Randy Anway: @kevin, yes; could ppp present a path toward accelerating science?

02:09:35 Maya Dutta: Given that economic progress and "success" hinges on the production of goods and extraction of natural resources, how do we make the shift to regenerative practices throughout our supply chain? How do we make sure our

economic and political systems are transforming at a system level?

02:10:13 Kevin Maher: @Randy perhaps, I believe we need experimentation with models that focus on implementation.

02:10:16 Catherine LeBlanc: Would be wonderful to have ability to have microinvesting to accelerate regenerative process since not obvious investment actual money for our values

02:10:29 Dita Brigid Vizoso / Nomad UK: How would it be to bring accountability to actual, real people's needs rather than using the proxy of monetary units? If a local community has their needs met (food security, shelter, health, a caring community, social technologies), does it need leverage within the financial paradigm? And how would that ultimately benefit the individuals? And the soil and thus our long term survival and real wealth?

02:10:35 nancyderen: What an incredible webinar. Needs wide sharing thank you all so much!!

02:10:52 Louise Mitchell: Yes, Thank you all! This has been an incredible event!

02:11:02 Maiyim Baron: excellent info and so encouraging. So please Rep. Pingree gave us so much. She's terrific encouragement!

02:11:03 Robert Rak: thank you all for a great seminar!

02:11:05 Ralph Baker: Thanks to all the speakers, and for Bio4Climate for hosting this wonderful session!

02:11:22 Troy Dunn: Thank you!! What an amazing panel of speakers!

02:11:33 Lynne: Thank you to everyone who made this conference possible.

02:11:34 Dita Brigid Vizoso / Nomad UK: This has been an amazing and inspiring event. It brings me hope that these conversations are happening! Thank you Adam, too for your great hosting.

02:11:38 Maya Dutta: You can support Bio4Climate here: <u>https://bio4climate.org/donate/</u>

02:11:39 Claryce Evans: Iroquois farm is a possibility for investments. (Link: <u>https://iroquoisvalley.com/</u>)

02:11:52 Catherine LeBlanc: Thank you Claryce

02:12:35 Randy Anway: @kevin; also perhaps a role for native americans

02:13:05 Kevin Maher: @Randy, yes I know a couple working at that, Kmaher@crannmoradvisors.com

02:13:10 Maiyim Baron: great to see so many friends in this movement today!

02:13:16 RD: Thank you that was great!

02:13:24 RD: Hope we can help

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#### Resources:

#### Walter Jehne

Walter's lecture on the soil carbon sponge: https://www.youtube.com/watch?v=123y7jDdbfY

Lecture on climate solutions based on water cycles: https://www.youtube.com/watch?v=DQN9t-g2J-0

Another lecture on the soil carbon sponge: <u>https://www.youtube.com/watch?v=IFViQIZF88c</u>

Lecture on regenerative agriculture given to Andhra Pradesh Community Managed Natural Farming group: <u>https://youtu.be/5z1AfUbJh\_w</u>

### Vijay Kumar and Andhra Pradesh Community Managed Natural Farming

Vijay's presentation on Andhra Pradesh Community Managed Natural Farming Movement from January 2021 as part of Biodiversity for a Livable Climate's *Life Saves the Planet* lecture series: https://forum-network.org/lectures/andhra-pradesh-community-managed-natural-farming -movement/

APCMNF Facebook page: https://www.facebook.com/APZBNF

Website currently under construction: https://apcnf.in/

Short UN video on APCMNF project: <u>https://www.youtube.com/watch?v=vF40gF-PUcs</u>

### **Chellie Pingree and Agriculture Resilience Act**

Overview of the Agriculture Resilience Act: <u>https://pingree.house.gov/netzeroagriculture/</u>

Short video of Chellie introducing the act: <u>https://www.youtube.com/watch?v=mUzKe6CjWxw</u>

USDA Climate Hubs: https://www.climatehubs.usda.gov/

# Other related resources on water, soil health, regenerative agriculture, and ecosystem restoration

*Restoring Water Cycles to Reverse Global Warming* conference: <u>https://bio4climate.org/program-tufts-2015/</u>

Carbon Farming Conference: <u>https://bio4climate.org/conferences/bcc/</u>

Scenario 300 and Making the Climate Cool Conference: <u>https://bio4climate.org/scenario-300/</u>

Michal Kravcik is a Slovakian hydrologist who works on the "small water cycle." Here is his presentation on "The New Water Reality":

<u>https://www.youtube.com/watch?v=g-uVE9IPD4s</u>, and his presentation on "The New Water Paradigm": <u>https://www.youtube.com/watch?v=jCEB9VAcssg</u> Free pdf of his book, *Water for the Recovery of the Climate: A New Water Paradigm:* <u>http://www.waterparadigm.org/download/Water\_for\_the\_Recovery\_of\_the\_Climate\_A\_N</u> <u>ew\_Water\_Paradigm.pdf</u>

Bio4Climate's research compendium, Vol 2 Issue 1 on Water and Soil Ecology: <u>https://bio4climate.org/wp-content/uploads/Compendium-Release-Vol-2-No-1-r.2.1.pdf</u>