

Riding A Sustainable Wave

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[In this episode, the first dramatized one of the series on sustainable development, we follow two bikers, Arun and Sekhar, as they speed through some unknown landscape and come across people of various standing. The people they meet bring up the issue of damage to nature and the ways to achieve sustainable development. The discussion swings from small talk to discussing exemplary concepts. Through all these, the listeners get to the essence of sustainability.]

(Two bikers driving, slow speed side-by-side and speaking to each other on a highway.)

1. Arun
2. Shekhar
3. Munglu
4. Gagan
5. Arvindan

Arun: What time is it buddy?

Sekhar: Half past eight. We have been driving for more than two hours now.

Arun: Feeling tired?

Sekhar: Not that. Just thinking how barren this place is....

Arun: Yeah, so little vegetation. Haven't noticed a pond even in the last one hour....

Sekhar: Hmm...that's what I was saying. Looks like this place will soon turn into a desert!

Arun: One more desert on the map? Will be more taxing for the kids eh? More to mug and remember ! (Laughs)

Sekhar: Right! (Laughs) Want to give it a name before anyone has the privilege?

Arun: Yeah, not a bad idea! Umm...ok, let's call it Arun-Sekhar desert!

Sekhar: You are being selfish! Why should your name be there before mine (both laughs)...but anyway, I am feeling thirsty now....let's stop for a minute.

Arun: Want a break? Ok...see...over there...right of the road...a big tree is there. Don't know how it survived in this place. But we will have some shade at least. Let's go

(Engine revs up. The two approach the tree.)

Arun: Sekhar look....someone sitting beneath the tree.....a lean fellow....looks like a sadhu or someone like that...

Sekhar: Sadhu! Great! He must be an expert in chemistry. I want to know what is going to happen to my catering business.

Arun: Huh...you still believe in astrology? It's all baseless, I told you so many times.

Sekhar: Why burden yourself? I am not telling you to ask for your own future details. Let me have the liberty.....come on, let's park here (engine stops. They get down from their bikes and approach the tree.)

Sekhar: (in whisper) How should I address him? Baba...or something else?

Arun: You know better! You are used to all these things....but I also have something to ask about.

Sekhar: (Giggles)...you too brother? Falling in line? What is it you want to ask about?

Arun: The next filling station. We are low on fuel buddhu!

Sekhar: (composes himself) Ok ok do whatever you like....(raises his voice) Baba!

(The lean man seems to be asleep. He doesn't open his eyes)

Sekhar: Baba! Namaskar....I mean pranaam baba...

(The man sits up, clears his throat)

Munglu: Who are you? I am not baba, I am Munglu....

Arun: Munglu? So you are not a sadhu?

Munglu: Depends on how you think of me. I am not a thief, haven't stolen anything from anyone in all my life. So you can jolly well call me a sadhu!

Sekhar: (Sounds very eager) Could you tell my future by looking at my palm? I want to know about the future of my catering business.

Munglu: Sorry to disappoint you. I have no expertise in foretelling. But you look quite tired and thirsty as well....but see, I have not even a mug of water to offer you.....

Arun: Don't bother about that munglu....err... baba! We have our stocks. Could you help us by telling how far the next petrol pump is?

Munglu: Petrol pump? It must be far away....I mean I haven't seen a petrol pump in years. My legs always ache these days. I cannot walk much. (Suddenly something pops up in his mind) why, don't you have a cellphone? People who pass by always use that to find their desired locations.....

Sekhar: GPS? You know about that even? Great!

Arun: (Lowering his voice) I can see you are thoroughly disappointed. Rural folk, talking of GPS, no knowledge in palmistry (giggles).....(raises his voice) you are right baba. GPS should have helped but it's not working somehow. That's why I asked...but I must have a sip from my water bottle first. Help yourself Sekhar!

(They both drink from their bottles)

Munglu: Even if GPS was working you would not have found a single water body in this region...he he he...can I have a sip my dear?

Arun: So you are thirsty too....ok, open your mouth....I can share only a little....long way to go still....

Munglu: That will be so nice of you... (opens his mouth and drinks and Arun pours water) (satisfied) If I can ask...where are you going?

Arun: We are out to see the diversity of our great country.

Sekhar: We have already covered quite some distance. But this place is so different.

Arun: You live here I suppose. But can't see any hut in the vicinity?

Munglu: You have to travel a couple of kilometers from here. Over there....behind that mound...you go straight and then turn right....

Arun: Yeah yeah, I understand perfectly.

Munglu: You do, no? You must be wondering why I travel to this spot. Why I sit here....under this tree which....yes, which stands so awkwardly amidst this barrenness?

Arun: I was about to ask that. I mean....do you come here to beg? But, well...who will come here to give you alms!

Munglu: You are so right. No one will come to do that. I came here to relive my memory.

Sekhar: Memory? Of what?

Munglu: Of a large pond. No, not one, but two. Side by side....and this tree stood right between them. So large were these ponds. You know, from here...there...where the road is taking a turn....and the other also...you know....and there were many more...

Sekhar: Yes I can guess that those were very large. But where are those now?

Munglu: Such a lovely scene it was. You know...a kingfisher swooping down right from the trees...yes there were a lot of trees.....and the kingfisher snatching a shiny silvery fish....sitting in the cool breeze I watched.....such a sight....

Arun: But where are those waterbodies? Such large expanse of water cannot evaporate overnight! What happened to them?

Munglu: Those were just drained away. Greed! Hatred! They fought and to teach a lesson to the opposing side they drained away water to their side. But, you know, they couldn't enjoy that water. No! None of the two sides!

Sekhar: Calm down Munglu. Who were they? Why did they behave like this?

Munglu: Two communities...fighting each other....the lazy, greedy rajas doing nothing but bent on sending the peasants to fight and die. Those dirty rajas stole water and you know...sometimes they also poisoned the waters so that the other side could not use them.

(A truck arrives near them, stops and the helper jumps out yelling at the driver. A case of disagreement has occurred between them. The driver also opens the door, comes out and yells at the helper.)

Driver: I will kill you and bury you right here, you rascal!

Helper: (as he runs) Eh...as if I don't know what you idiot is capable of! Go away, I am not traveling with you any more....go on your own. Go!

Driver: You mischievous insect....you suck me and now you tell me to go alone....wait ...wait, I am coming! I shall beat the hell out of you!

(The driver run towards the tree as the helper hides behind it. Arun intervenes.)

Arun: Hey...hey...cool down. What happened? Why are you at each other's throats?

Driver: Sir, you know this wicked fellow; I gave him this job as a helper and he...that rascal...

Arun: What has he done? Why are you so angry?

Driver: (panting) Sir, me Nataraj, I come from a very good family, we are much respected in our locality....and this helper, Gagan, wants to drink water from the same bottle which I do. If it was our village, you know sir, he would not have been able to come so close to me even!

Sekhar: Oh I see! It's the shortage of a bottle that has brought about this great battle!

Driver: No sir! It's not that. So many times I have offered an empty bottle and asked him to use it for his own use but no....he would again reach out for my bottle of water! Today I have to settle this for once and all!

Sekhar: No-no, don't get so angry. Let us see. Where is Gagan. Hey come out, come here I say!

(Gagan comes out sheepishly)

Sekhar: Why Gagan, why can't you use your own bottle of water? Why do you use his? In any case it would be hygienic if you two have separate bottles. Isn't it?

Gagan: I know but I always forget! That's why sir (sound apologetic)...during our journeys I have to...

Driver: See sir, he is now making excuses! I will give you such a slap...

Arun: Please don't do so Nataraj. I assure you he will listen to your instructions from now on. Ok then, get on with your journey.

Driver: Come you stupid. And do remember what these educated men have told you.

(The two board the truck and drive away.)

Munglu: Ha ha ha....see! There can be so many types of battles just over water! These two can't share the same bottle....what a funny scene....

Arun: It's not trivial Munglu as you are trying to show. People can be arrogant and superstitious over the use of water.

Sekhar: And whole villages can get into a battle over such things!

Munglu: You are standing in such a battlefield sir! But you know, there was an aged fellow in our village who tried to stop this fighting. Yes! He used to tell us stories about water...

Arun: Stories about water? I am intrigued Sekhar!

Sekhar: So am I. Tell us what stories you had heard from him.

Munglu: He used to say that a large desert lies to the west of our country. It's totally barren, no trees, only shrubs, absolutely dry!

Sekhar: Yes there is one. It's called the Thar desert.

Munglu: I don't know what it is called. I only know the story. The old man said that the inhabitants were so clever that they could store water even amidst that barrenness. Yes!

Arun: The old man told you how water was stored in the desert?

Munglu: Yes he did. He said that the little rain that fell in those areas was collected. There was 'agor' where the rainwater was collected. All structures were done by the people themselves. Stones, side by side and up. Water was collected there.

Arun: Sekhar, I have a feeling that this fellow is trying to teach us rainwater harvesting. And whatever he has heard is not wrong.

Sekhar: Is it?

Arun: Yes! What he refers to is a traditional system called Paar. You know 'kui's and 'beri's are dug in the storage area which he calls agor. Those 'kui's are normally 5 to 12 metres deep. This is the most predominant form of rainwater harvesting in the region, I mean western Rajasthan. And that really sustained the people there.

Munglu: And our rajas! They told us to destroy water! And now this barren land.....oh God what have you done to us!

Arun: Rajas did contribute to water conservation in Rajasthan but those were costly and difficult to maintain. However we cannot take the credit away from them.

Sekhar: But look at Munglu! He is becoming inconsolable! I think we should leave him now. A lot of distance to cover anyway.

Arun: Yeah, let's go! I think Munglu will find someone else to hear his sad story.

(They speed off on their bikes.)

Arun: What's the time now Sekhar?

Sekhar: Half past three. We have been on our machines for quite some time. Time to take a break.

Arun: (still riding) yeah but I can't see a suitable place. Let's see.

Sekhar: Hey look...there, on the left! A few tents.

Arun: Yes, some stalls as well. Some of those are likely to be food stalls.

Sekhar: Thirsty for tea?

Arun: Of course! Come let's take this lane.

(They turn and halt after a few seconds.)

Arun: Ah, the sun has mellowed now. It's better, temperature is down. (Suddenly) Hey Sekhar look, there is really a tea stall. Come, run!

Sekhar: Wait. Don't be silly. The stall owner is not going to run away.

(They approach the stall.)

Arun: Hey brother! Is your oven still hot? Can we have some tea?

Sekhar: Please don't say no. My friend might faint. Ha ha...

Stall owner: Please sit down. Give me five minutes please.

Sekhar: Look at that gentleman. He is coming here I suppose.

(The man shouts as he approaches 'Hey Parag, Kannan pack up now. It's enough for today.' He enters the stall and takes a corner seat, orders tea.)

Arvindan: My usual tea with your special biscuit....ah, it has been a hectic day!

Stall owner: Right sir.

Arvindan: You have new guests today, I can see.

Arun: (Smiles) I am Arun and this is my friend Sekhar. We are on a tour of our country.

Arvindan: Oh I see, globe trotters! By the way, I am Arvindan. I am an anthropologist by profession and we are doing some digging here...

Sekhar: Digging?

Arvindan: (Laughs) Well that's a rough way of saying that we are doing some field work here. We are studying the different layers of soil to understand why this land has become so barren.

Arun: You mean to say that this was not so barren earlier?

Arvindan: At least written records say so. Nothing unusual of course. There have been many instances in the past where a lush green pasture has turned into a barren, depopulated area. Whole settlements have disappeared.

Sekhar: Yes you would know better. I feel curious. Could you please tell us about some cases.

Arvindan: Sure. But not before I take my first sip of tea. (laughs)

Stall owner: Here you are. Tea for all. And your biscuit sir.

Arvindan: (Takes a sip) Now it's ok. Yes, we were discussing the erosion of soil and civilization as a whole. I shall tell you about Mesopotamia.

Sekhar: You mean modern Iraq?

Arvindan: Exactly my dear! Modern Iraq! Mesopotamia, the traditional site of the Garden of Eden, out of which come the stories of the Flood, of Noah and the Ark, of the "Tower of Babel, is jotted with full of records of a glorious past, of dense populations, and of great cities that are now ruins and desolation.

Arun: But why? They had their own irrigation systems. They had...well what are those called...yeah, two great rivers, Tigris and Euphrates!

Arvindan: And had huge population and too much silt!

Arun: I don't follow.

Arvindan: Agriculture was practiced in a dry climate by canal irrigation with muddy water from the Tigris and Euphrates Rivers. This muddy water was the undoing of empire after empire. As muddy river waters slowed down, they choked up the canals with silt. It was necessary to keep this silt out of the canals year after year to supply life-giving waters to farm lands and to cities of the plain.

Sekhar: Ok, so what is the problem with that?

Arvindan: As populations grew, canals were dug farther and farther from the rivers. This great system of canals called for a great force of hand labor to keep them clean of silt. The rulers of Babylon brought in war captives for this task.

Arun: Sounds exciting!

Arvindan: Yeah but the end was not exciting. As these great public works of cleaning silt out of canals were interrupted from time to time by internal revolutions and by foreign invaders, the peoples of Mesopotamia were brought face to face with disaster in canals choked with silt. Stoppage of canals by silt depopulated villages and cities more effectively than the slaughter of people by an invading army.

Sekhar: That's shocking! Never knew of this part of the history of Iraq!

Arvindan: That's because traditionally history is about winning wars and claiming the throne. Who bothers about sustainability?

Sekhar: Could this have been prevented anyway?

Arvindan: Difficult to say Mr Globe trotter! The population was huge and the land or the produce at normal level was insufficient to support them. Plus remember the SILT !

Arun: It's really tragic. Is there any other example like like this sir?

Arvindan: You need to know the name of the great soil conservationist Dr Walter Lowdermilk. He studied the record of agriculture in countries where the land had been under cultivation for hundreds, even thousands, of years.

Arun: And what did he find?

Arvindan: He discovered that soil erosion, deforestation, overgrazing, neglect, and conflicts between cultivators and herdsman have helped topple empires and wipe out entire civilizations.

Sekhar: So he must have suggested measures to stop such destructions as well?

Arvindan: Of course! He learned that careful management of the earth's resources, through terracing, crop rotation, and other soil conservation measures has enabled other societies to flourish for centuries.

Sekhar: I feel like listening to one story about such flourishing.

Arvindan: Well, this was Dr Lowdermilk's experience in North Africa, near the Sahara desert. Everyone knows that rainfall is scanty in that part. But Lowdermilk discovered something remarkable near the desert, about 70 miles south of Tebessa. He and his team found a remarkable example of ancient measures for the conservation of water. At some time in the Roman or possibly pre-Roman period, peoples of this region built check dams to divert storm water around slopes into canals to spread it upon a remarkable series of bench terraces.

Arun: So they cultivated successfully with this water?

Arvindan: In Roman times a high degree of conservation of soils and waters was reached. This was done with an intensive culture of orchards and vineyards on the slopes and intensive grain growing in the valleys.

Arun: These are so good lessons. Only if we could follow them !

Arvindan: Don't lose heart my brother. While we stagger to find this barrenness in a place where there was flowing river and lush green meadows at one time, we could take heart from some other experiments as well.

Sekhar: I see. Example from which country?

Arvindan: It's Japan. land of the rising sun! But no, it's getting dark. Look at the fellow. He is preparing to close his shop for today. We shall have to leave.

Sekhar: Oh, really...it's getting dark.

Arvindan: By the way what are your plans for tonight globe trotters?

Arun: Nothing in particular. We shall have to look for some shelter. Let us see.

Arvindan: You can share space in my tent tonight. I mean if that does not go against your policy of globe trotting.

Sekhar: Not at all. We shall consider us very fortunate.

Arvindan: Come then...I shall tell the story of One Straw Revolution as we walk to our tent. Come.

Arun: We haven't paid for the tea yet.

Arvindan: Leave that to me. Add that to my account my boy. Come, this way.

Sekhar: What is this one straw revolution? Is it the name of any movement?

Arvindan: You can say that way. But basically it's the title of a world famous book. It's written by Masanobu Fukuoka.

Sekhar: And what does it say?

Arvindan: It tells you the story of a holistic view of agriculture, of preserving land, conserving water, sustaining variety through landscapes and on the top of it all it tells the reader of a philosophy. A sustainable philosophy.

Arun: Sounds exciting!

Arvindan: Exciting it is! Fukuoka produced citrus and grains including rice in the same farm. He believed in minimal interference to create a natural balance. He strongly held to the fact that upsetting the balance by using insecticides to destroy pests perpetuates a cycle of imbalance. This creates a system permanently dependent on insecticides, which results in greater long term insect damage once predators are destroyed.

Sekhar: And he succeeded in having a rich harvest with all his philosophy?

Arvindan: Yes he did. His message is becoming increasingly important today, especially in the light of such issues as the various phases of food crises. Though not directly but in a way it urges us to rethink our strategies about genetic engineering and the manner in which cattle are farmed.

Sekhar: Ah...I really need a copy of the book.

Arvindan: I can gift you one.

Sekhar: Really?

Arvindan: But you have to choose. You know, I am a very good cook. So either you can have khichdi cooked by me or a copy of Fukuoka's book!

Arun: I have an expert demand!

Arvindan: Expert demand? I have heard about expert comment but never about expert demand! But anyway, let me hear about it.

Arun: I shall have both. The book and the khichdi as well!

Arvindan: Ah...ha ha ha (Sekhar joins in laugh.)

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