



BALRAMPUR CHINI MILLS LIMITED

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Symbol: BALRAMCHIN	Scrip Code: 500038

Dear Sir/ Madam,

Ref : **Regulation 30 of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015**

Sub: **Transcript of Conference call**

In terms of Regulation 30 of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, please find enclosed herewith the Transcript of the Conference Call relating to Polylactic Acid (PLA) project held on 21st February, 2024.

The same has been uploaded on the website of the Company at the following web page:

<https://chini.com/investors/concall-transcript/>

Thanking you,

Yours faithfully,
For **Balrampur Chini Mills Limited**

Manoj Agarwal
Company Secretary and Compliance Officer



Balrampur Chini Mills Limited Conference Call Transcript February 21, 2024

Moderator: Ladies and gentlemen, good day and welcome to Balrampur Chini Mills Limited's Conference Call.

As a reminder, all participant lines will be in the listen-only mode and there will be an opportunity for you to ask questions after the presentation concludes. Please note that this conference is being recorded.

I now hand the conference over to Mr. Anoop Poojari from CDR India. Thank you and over to you.

Anoop Poojari: Thank you. Good afternoon, everyone and thank you for joining us on Balrampur Chini Mills conference call to discuss its venture into Poly Lactic Acid Manufacturing.

We have with us Mr. Vivek Saraogi – Chairman and Managing Director of Balrampur Chini Mills; Ms. Avantika Saraogi – Executive Director and Mr. Pramod Patwari – Chief Financial Officer of the Company.

We would like to begin the call with brief opening remarks from the management following which we'll have the forum open for a question-and-answer session.

Before we start, I would like to quickly point out that some statements made in today's call may be forward-looking in nature and a disclaimer to this effect has been included in the invite shared with you earlier.

I would now like to invite Mr. Saraogi to make his opening remarks.

Vivek Saraogi: Good afternoon everyone and thank you all for joining us on Balrampur's Conference Call to discuss our foray into Poly Lactic Acid.

We have been discussing for a long time with all our shareholders, our next step, and our next ventures. Our team has been researching over three to four years and the management team therefore has approved this basic investment to establish a state-of-the-art PLA project costing around Rs.2,000 crore with globally comparative size of 75,000 tonnes per annum and this represents the single largest investment in the history of our Company.

Besides making business sense, which we'll talk about, this decision also reflects our commitment to innovation, our belief in sustainable development and our ambition to leverage our capabilities in meaningful and impactful ways. The PLA project is a natural extension of our efforts, signifying our vision to lead in the industry while contributing positively to the environment and society.

As we foray into this new segment, it is important to understand the sector dynamics. Just some very basic data. The global primary plastic production is currently ~400 MTPA with a market value of over a trillion USD. This is the plastic used in main applications of life. Despite their usefulness, traditional fossil-based plastics represents the linear and are not a circular economy. The global PLA market is ~300,000 to 400,000 tonnes per annum, growing strongly, often driven by national legislation. So, now this is some global data.

Our government in the budget 2024 and we put out a clause which they put into the budget. I quote in the 2024 budget, a significant step towards promoting green growth is highlighted with the introduction of a new scheme for bio-manufacturing and bio-foundry. This initiative aims to boost environment-friendly alternatives like biodegradable polymers, bioplastic, bio-pharmaceutical and bio-agriculture inputs. This is a measure which has clearly been put with a premise of combating global climate change which impacts the environment owing to single use plastic consumption.

I would also like to just inform everyone that we have appointed Mr. Stefan Barot as the Head of the Project. Stefan comes with a wealth of experience of over 35-years, including thirteen years in the bio-plastic industry. He has gracefully concluded with his role as President of EU Bioplastic Association and his current assignment before he joined us, was as CEO of a bioplastic compounding company. Prior to this, he worked with Total Corbion in various capacities and therefore he is aware of the entire techno-commercial requirement of this business. He is a chemical engineer, representing the technical part and he was head of marketing there. He would be joining us 1st of March.

So, with this, I hand over the floor to Avantika to take you through some basics.

Avantika Saraogi:

Good afternoon everyone and thank you for being on this call. I just want to outline the landscape of the PLA market scenario because I envisage that is probably an important part of this equation. My dad highlighted briefly about the size of the plastic market.

I just want to bring to everybody's notice that globally, places like Europe are moving towards a 30% bio-based chemical and polymer economy of which PLA can replace the sizeable amount. Clearly, it happens to be the cheapest and the most largely manufactured bioplastic in the world today, and therefore I would consider it a pretty safe space for us to venture into.

Other than this, if we zoom in a little bit and just think about India, we alluded to 19 single use plastic bans in the earlier statement. Now these things alone constitute five million tonnes of plastic in India. At least 50% of this can easily be replaced by PLA, whether it is in a compounded or neat form. So, our 75,000 tonnes would be probably a blip in that kind of a market. So, the market is there, and the bans were not always able to be enforced effectively due to the lack of an alternative material. And we know that PLA is actually a very, very good material for replacement.

Another question might be a bit on the on price. So, PLA will be slightly more expensive than plastic, I would say maybe around double, but when there is a ban in place, then price of the traditional plastic versus the bioplastic no longer remains.

Other than this I want to mention that without any intervention from us or any dialogue from us, the world and India is already moving towards PLA in its compounds, for example, for years, Starbucks has been using PLA in its cup, straws, stirrer, liners and paper cups even before there was any legislation in place. Companies are becoming conscious and moving towards a greener tomorrow without any push. Of course, legislation help and companies like Amul, which is a daily household name in our country, it has moved on to PLA straws as of very recently already. When a company like Amul moves towards it, everybody would happen to follow, I think.

Other than this, a notable news, which is also shared in the release was that DRDO has launched water bottles made from PLA, including the cap, labels, everything and they are also in the process of doing juice bottles as well as food trays and everything for the armed forces, especially when they go to remote locations as disposal sometimes would become an issue.

Other than this, garment manufacturers, Aditya Birla is the largest name, so we are taking it. But from the largest to the smallest, garment manufacturers are moving towards PLA and its compounds to cling film that we see around single garment, this is moving towards bioplastic. These are just some of the markets that have already developed in India, which is well-known.



Other than this, PLA is an engineering polymer for the 3D printing industry. What I mean to say by this is there is no better polymer in the world today for 3D printing other than PLA.

Also, since PLA is a bio-based non-toxic plastic and when it breaks down, it breaks down into lactic acid which is naturally occurring. It is quite a sort after material for medical devices which need to be used in our bodies, which can then just kind of fade away without leaving any kind of impact on the body.

Other than this, I would say that we aren't just thinking in a bubble of creating PLA and PLA alone, but we are talking about the entire value chain right until the end of life. So how I would say this? As we know already that we start off with sugarcane, we convert to sugar, then it would come into this plant, it would ferment it to lactic acid and then finally it would be made into lactide and polymerized into PLA, that's the process. And then we would either compound it or we would sell it neat to the converter to make it into an actual bag or a bottle or a straw or a cup or a paste, whatever you require, and then it goes to the end consumer. Supposing, it's used for packaging, then one more person who has to fill the packaging comes into place. We will also be hand holding the entire process and we have also invested for this particular part into a company called Konkan Speciality Private Limited. They are one of the leading compounders and converters of bioplastics in the country, and they are able to provide solutions to any and everyone who needs and would like to use bioplastics in their products.

Apart from this, there is a concern about PLA being compostable and not biodegradable under normal conditions. Though, this is a western concept, in India, the temperatures rise so much and in summer probably PLA would disappear. But having said that, the end-of-life scenario is two-fold.

So, the first one is that it is compostable, therefore it fits very well into our bio-gas story in which India has already set foot and is kind of running hard, it can be taken to a composting facility where biogas is being generated by anaerobic digestion. So that's one end of life scenario for it. But the better end of life scenario would be, that if we were able to recollect and chemically recycle it. It does not behave like fossil-based plastic where it degrades. PLA degrades back into its original monomer from which it is then re-polymerized, and it has the strength and the ability of the virgin PLA that we would have made. So, this is also a very, very big possibility and a big idea in our minds. How it plays out? It has a lot more people in the value chain to talk to.

Other than this, this project will take around 2 to 2.5-years to be executed. So, in that case we have this entire time to create the market and develop the business so that as and when our production comes in, it gets evacuated as soon as it possibly can.

Now, there are other biopolymers which are either bio-based or bio-degradable or both. So, the main ones I would say are PBAT and PHA which have gained traction in the recent times. So PHA is a bio-based and a bio-degradable polymer like PLA, and it's softer in a way that it degrades faster than PLA. So, I would say that this is actually a very, very good thing for us. PBAT similarly is stretchy and a less rigid version of a plastic which is made from a fossil-based source at the moment.

So, now these things are not in competition with each other. In fact, all these three plastics would feed off each other's demand because you make recipes, and you make compounds with as and what you need in order to create the properties that you so need. For example, if I wanted to create a marine degradable plastic which is prone to the ocean and it goes away. It would probably use PLA and you could probably compound it with some small percentage of PHA which would then lend this characteristic to the entire product. Similarly, if I want to create a softer bag, then I would probably blend it with PBAT which would cut a bit of the rigidity of PLA and also give some strength to it, and both would feed off each other to create this perfect product which would then go in the hand of the people. So, these bioplastics as much as they grow together would actually give us a lot of tailwinds and it's not in competition, but it's essential to the growth of each other.

I think that's it from me. And we are open to questions.



Moderator: We will now begin the question-and-answer session.

The first question is from the line of Sanjay Manyal from DAM Capital.

Sanjay Manyal: Sir, just want to understand a bit of economics of this project means what could be the asset turnover, what could be the margins in this business? So, won't there be a concern about the sugar production, because raw material would be sugar. So, in a current scenario like there could be a restriction on this product as well in the future whenever there is a decline in sugar production, so that's one. And if you are going to a B2C business also, as you have been mentioning, so will you create a distribution network also for this product?

Vivek Saraogi: Noted. Avantika, you take up the last, I'll take the first.

Avantika Saraogi: So, if we just go backwards, this will still largely remain more B2B than B2C in many ways, because we have to first sell to a compounder. But if you consider that as a B2C model, definitely, we would be creating distribution networks not only in India, but all over the world as well. And these are fairly established simple plastic distribution models which we would just kind of partake in. It's not at all anything complicated and it's not even very capital-intensive in anyway, that's one thing.

Vivek Saraogi: If ever there is a shortage in sugar production, the plant will be able to run on starch which means other forms of starch.

Avantika Saraogi: Any other bio-based material which can be used to make ethanol can also be used to make PLA.

Vivek Saraogi: And the quantum of sugar we're looking to use to make this much PLA is insignificant in the country's perspective. For the ROI part, I'll give you a dialogue at the end.

Moderator: The next question is from the line of Shailesh Kanani from Centrum Broking.

Shailesh Kanani: So, I have two, three questions. One is that who is the technology partner we have selected for this project and whether that provider would be giving the technology in pieces or as a whole? Second is that you alluded to the budgetary announcement. So, what kind of budgetary support are we looking at, any immediate we are looking for this project from the government side? And my third question would be, there are some international companies who are into this bioplastics business. So, they are into losses, how does our unit economics stand against them on profitability front?

Avantika Saraogi: So, I leave the budget question to my dad. I'll address at first the other bioplastic manufacturers, and I don't know where you got this data of loss, because as far as I know there are only around three or four large PLA ventures, none of which are per se listed, and secondly, I know for a fact that they are not in losses at all as far as I know. Secondly, I want to talk about a strategic advantage that we have, which no other player in the world has. We would be located right next to sharing the wall with one of our sugar units and it gives us a lot of basic landscape which is already there. We would have bagasse of our own for power. We would not need to use fossil-based or gas or any other sources of energy. So, these are the strategic advantages that nobody else in the world has. So, in terms of cost of production, I should hope that our cost of production shall remain up there.

Vivek Saraogi: The NatureWorks and these people, the ROIs has increased.

Avantika Saraogi: So yes, I mean NatureWorks who is the pioneer of this technology started 20 years ago, but since the last five years it has been doing quite well, I would say, and you can see that with the growth of the PLA market from just simply between 2019 & now. NatureWorks also announced their second plant and people are announcing second plants left side or center. So anyway, other than this, about the technology portions, we are not yet at liberty to say, but like soon enough we will also disclose all those aspects.



- Shailesh Kanani:** So, if I can just revert, as you rightly said, there are not many listed players, so I was looking at one of the listed players, Danimer Scientific, which is in US, but it is into both the products, that is PLA and PHA. So, they are into losses so I was referring to those numbers. You are right.
- Avantika Saraogi:** The information is not correct about Danimer being a producer of PLA. They are in to PHA.
- Shailesh Kanani:** PHA and PLA, both they are into.
- Avantika Saraogi:** They are combining most probably they are not producing PLA.
- Vivek Saraogi:** If I can share maybe the NatureWorks result in all which is in public domain.
- Avantika Saraogi:** The Total Corbion results could possibly be.
- Vivek Saraogi:** Let me just take you through the entire landscape of the government support as I see it. When we build our project, we only sort of look at what the existing schemes are already. So even in our P&L, we try and not build that. So, there is an existing set of schemes already in the UP industrial scheme as well as the central scheme. That is part one. Part two, it very clearly highlights what I've said in the beginning, that if the budget is set, a new scheme is on the anvil. The new scheme probably will come out with the full budget, we will await for it and work very closely with the government. So, if we see how this government has sort of taken industries ahead and the way it's worked, so the government is very sensitive on a few sectors. If you see the API scheme, the micro-chip scheme, the defense in cane, the climate change, the passion of our Hon'ble Prime Minister towards a bio-based economy, etc., We are very clear that there is a scheme which is going to be lucrative. We are also very clear that the "Swachh Bharat" and "Atmanirbhar Bharat" for production will both come into play here. The climate change, the amount of money the world is putting in and what probably would, sort of not see us through, but put us a long way ahead, could also be there in terms of the scheme. So, the climate change you do see some pennies here, you get pounds in the climate change. "Atmanirbhar" we have seen. So, what I'm saying is we see a lot of tailwinds coming in into this phase from the government. We don't do government-based numbers, we do our own numbers and at best we will take some existing basic schemes in goodwill. So here we are seeing a lot of benefit from the government in each sphere of this business. But our numbers don't sort of replicate that. I'll just take you through our research and how we have done our numbers. So, as Avantika just said, our raw material is going to be at our doorstep with zero transport cost. So, if you see some of the global players they transport starch to their facility. Our energy needs are again at our doorstep. We've seen how the gas pricing can be erratic, how crude or any energy pricing globally and our energy cost and this is an energy-intensive business. So there lies our advantage, one, there lies our advantage, two. Our costing, our labor, our machinery, and our ability to stitch the technology together, we have no doubt, we have spent a long time before announcing our project, probably years of dialogue and research. Very soon, we should be able to put up a far more detailed scheme in front of the board with all the details of the technology partner also. We don't believe in going with the second best, we believe in going with the best. So, our local advantage, our locational advantage, our looking at the government scheme. Our two years, two and a half years we have for research and development, product development and teams will be hired for that. Stefan being an expert on both the technical side and the marketing side and developing the market. That's what he did in his last venture and the Modi government's mindset over the years. This makes us believe that not only are we in the right space, but we also have the right capability and advantage to execute this and take this ahead. We see scalability also in our minds. So that's how we see the basic landscape of this business, why we got into it and our thinking as to how we will remain globally competitive in this line. This is to give you a basic idea of why we went into this.
- Moderator:** The next question is from the line of Vikram Suryavanshi from Phillip Capital.
- Vikram Suryavanshi:** Sir, you said that the raw material will be starch. So, will it be also flexible to use sugar raw material also or it will be only starch?



Vivek Saraogi: So, our basic raw material is only going to be sugar. At times, you might put something more.

Avantika Saraogi: I want to take it one step further. We can use sugar, we can use starch, in the future we plan to use agricultural residue, forest waste and even bad land crop which I mean this is all we have already.

Vivek Saraogi: It will all evolve, but our basic material is at our doorstep. Research will decide what is the best material to be used, etc., which is cost effective.

Vikram Suryavanshi: And when you say sugar, it is a sugar juice, not like process sugar.

Vivek Saraogi: It is raw sugar which is exported that sugar.

Vikram Suryavanshi: But we can ferment juice directly and save the cost or that will not be viable option?

Vivek Saraogi: No, no. Only Sugar.

Moderator: The next question is from the line of Vinod Malviya from Union Mutual Fund.

Vinod Malviya: So, I have some few questions. Can you provide some data like how much sugar need to be diverted for the 75,000 tonnes of capacity assuming 100% utilization?

Vivek Saraogi: Around 1,10,000 tonnes.

Vinod Malviya: And the second question, is there any Plan-B, let's say if the product doesn't get fructified for the use of bioplastic, can there be any other application which you can also target in case if bioplastic doesn't really pick up?

Avantika Saraogi: I don't understand the question.

Vinod Malviya: The PLA which you're talking about will be used to manufacture bioplastics, right?

Avantika Saraogi: No. PLA is a bioplastic.

Vinod Malviya: Is there any other application apart from this which you can use this plant if the bioplastic doesn't really pick up?

Avantika Saraogi: I'll make it simple. There is an interim product called Lactic Acid. We don't envisage that lactic acid would be the product, but there is an intermediary which is lactic acid in a situation that is horrible, that will always remain as an interim product. Also, lactide is an interim product. These things will remain, but PLA is definitely the play here.

Vinod Malviya: You said that sugar would be a primary raw material, but in case if the sugar is not available, the starch would be used. Can you also then broadly talk about what kind of IRR you would be making on the project both with sugar as well as using other starch in case if you don't get sugar?

Vivek Saraogi: Just to be clear, this is the first time in the last 15, 20 years I've seen this equation for one year. Two, the amount of sugar needed is not even 10% of Balrampur's production, which means it's not even 0.3% of India's production. Three, in my view, there is going to be no ban of a product like this because government is going to be very keen to make this. So, if there is a ban on export or ethanol, it does not mean a consumer like Coke cannot use sugar. I never see a problem of a consumer not being able to buy sugar in India. So, to my mind, that is not a risk at all. But people feel it, so people have put it on the table. Having said that, there is lot of options available.

Avantika Saraogi: And the IRR don't change.



Vivek Saraogi: IRR don't change substantially. So just to be clear, right, when ethanol diversion was sort of restricted, there was no consumer in India who is told don't buy sugar. Because you don't have sugar to mix in your tea on the table at home, it does not mean a candy manufacturer or a halwai or coke was told not to buy sugar because that is consumption. This is again a need which is very different. So, if we read what the new scheme for bioplastic, etc., and the sort of thrust the government has because of banning the products will be a very different mindset as we proceed in our field.

Vinod Malviya: Sir, can you provide the technology partner?

Avantika Saraogi: Actually, we're not yet at liberty to say. When we are, we will come out with an announce.

Vivek Saraogi: As you know, with these people, there's a lot of NDAs and all.

Vinod Malviya: Before this groundwork starts for setting up this project, do you plan to get any anchor customer by giving him some equity or any such arrangement which you're looking at, or it could be a pure commercial arrangement by sell arrange which you're looking at?

Vivek Saraogi: No, no, we don't look at diluting any equity in people in initial stages at all.

Vinod Malviya: So, you're not looking at any anchor customer or anything as of now?

Vivek Saraogi: So, just to be clear, the customer, if he's a buyer, it's going to be dime a dozen as we decided. So, there's no anchor customers so to say?

Moderator: The next question is from the line of Achal Lohade from JM Financial.

Achal Lohade: Sir, you talked about the global market. Can you talk about the India market, how big is that, how is it showing, how do you see over next four, five years, 10 years what is the kind of opportunity? Where I'm coming from is that is this the only one plant or could there be hundreds of such plants industry would look at, basis the size?

Avantika Saraogi: I did just touch upon it, but the single use plastic market alone in India is 5 million ton as of 2021, it's only grown from there. Most of this or at least at a conservative level, half of this can be replaced by PLA. So, if we see the headroom, that much headroom is there, so 75,000 tonnes in a market of 5 million ton is simply a blip. Of course, if the market in India grows, I think there is space for more manufacturers, and I think that would benefit the world and India quite greatly.

Vivek Saraogi: So also, I'd like to just put the concept of the fear of pricing, if one may. So currently, even if we want to tell the government that, please go ahead and let us say enforce this regulation on these 19 SUPs. The kind of supply we can commit will result in just enforcing it on caps and straws and things like that. And that cap on a bottle, the pricing will have no impact, hardly some paise, it will get digested with the tagline of being biocompostable. So, we do not even see a price resistance initially.

Avantika Saraogi: Or at all.

Vivek Saraogi: Or at all. Because of not using the entire bottle, because that many goods you can't give.

Avantika Saraogi: And, it's becoming more expensive to be more polluting as the days pass by.

Vivek Saraogi: There are EPR regulations in place.

Achal Lohade: Second question is in terms of the approvals, what kind of approvals are needed to go ahead with this facility in terms of environmental or other?

Vivek Saraogi: Nothing, regular, no tension there.

Achal Lohade: No issue with respect to approval?



Vivek Saraogi: No, no. We will be putting up all the machinery. That is not a problem.

Achal Lohade: If I may ask this question, it obviously appears to be an extremely good move from a sugar company perspective, but what is one of the key risks in your opinion which could worry you given the capital commitment you're looking at?

Vivek Saraogi: So, in our minds, we've debated the risk for over a year, and we come out having a solution for the risk, but how can I say, technology, quality and all, but we've all seen that quality.

Avantika Saraogi: There were 70-points risk mitigation plans. If we could think of a risk, we've mitigated it. If there's something we can't think of, then we are not capable enough to think of at the moment.

Vivek Saraogi: So what we are trying to say, we've debated a lot with this already, I think we have may be spoken, with technology, would you be able to make the correct product, we feel confident, but yes, definitely if you don't make the correct product, you won't be able to sell it, because the product has to be correct, whether you're costing would be okay we can research enough. So, things like that I think we've sort of debated and seen. What we don't have a problem at all is with the market. We think it's going to go leaps and bounds beyond our imagination. If you see PLI scheme, it's coming in for API, "Atmanirbhar Bharat", micro-chips, anything which India needs, defense, we have imagined that this would be the sort of market for defense manufacturers, I don't think so. So, probably what the government wants from its own country is supported very well. And as we said, we have not relied on it, but that in my mind will create a huge market.

Achal Lohade: Since you touched upon the scheme part of it, you did mention that there is already existing scheme under UP and central government policies. Can you give some color what kind of benefits are there as of now? And I know you're talking about the new policy the budget has come up with.

Vivek Saraogi: Exactly, UP government scheme is above 1,000 crore.

Achal Lohade: I don't know if you could see what exactly are the schemes in place?

Vivek Saraogi: There's the UP-government scheme of above Rs.1,000 crore, the GST waiver, there is a capital subsidy or GST, etc., import duty remission, etc., But those are all available in the public domain for you.

Avantika Saraogi: And they are industry-agnostic.

Vivek Saraogi: Just investment-linked schemes.

Achal Lohade: Would you be able to quantify what is the total benefit?

Vivek Saraogi: We will attempt to. No, we've not quantified as such because we are going ahead.

Pramod Patwari: We have not factored a cleaning of incentive amount in our internal leverages.

Vivek Saraogi: Achal, It's available on the internet.

Achal Lohade: You said you will cover the financial part at the end of the call-in terms of the utilizations, how soon can you touch peak utilization, how do you look at additional capacities, could the additional capacities come at a lower cost, any of those things?

Vivek Saraogi: So right now, being at the beginning of the execution of the project, yes, your questions are absolutely in place. So, what we have seen is we have some idea of the project cost now which we put up. Some clue on the turnover, some clue on the global pricing and our comparative costing to global pricing, replicability of the project at a lower cost. The kind of people we'll be working with will ensure that quality and the cost of



production we hope to achieve would be probably lower than the global cost of production. So, these are some numbers at our command and doorstep. Having said that, I would not want to venture out into giving an IRR with and without government scheme. That would come a little later when the DPR, etc., gets frozen and all the costing parameters get frozen. So, suppose you need 200 tonnes of bagasse, or you need 500 tonnes of bagasse. So, things will differ, or you need 1,10,000 or 1,20,000 tonnes of sugar. In the next 6-8 months, all that will get concluded. Having taken everything on the higher side also, having done sensitivity analysis, seen the numbers, and worked with the technology partners and consultants very closely before we've announced this project, we feel confident of a few things, being able to achieve capacity very soon, in a project like this maybe 3-6 months, we feel very confident of delivering globally, best quality USFDA level approved. All these checks and balances will be built into the warranties of the supplier on time and in full kind of concept. We also have understood the basic need for the raw material and energy cost and energy needs. We find it at our doorstep based on the identification of location of this project being closest to one of our largest plants. So having done things like that, we feel very confident on the financial side as well as the technology side. We've not yet factored in any benefit on funding which we hope to get at a much lower cost tomorrow or government schemes which exist or will come out. Plus, we feel extremely confident of building the market, this partner investment to KONSPEC, DRDO calling them, just shows us what kind of potential exists. We feel confident on all the spheres.

Achal Lohade: This will be largely domestic focus, right?

Vivek Saraogi: Yes.

Avantika Saraogi: Largely domestic focus definitely because it is better for the country. But in the event for any reason, if it's domestically not consumed, we would definitely export if the prices are good.

Vivek Saraogi: That's why I said our quality will be export standard. If what comes out from this factory, it probably would not be anything less which comes out from a NatureWorks.

Moderator: The next question is from the line of Kaustubh Pawaskar from Sharekhan.

Kaustubh Pawaskar: Just one question from the government scheme perspective. Like in ethanol what we have seen, government has a clear strategy that ethanol blending should be around 20% over the next five years. So, do you expect some kind of initiative coming in from government point of view that as ma'am said, that single use plastic is around 5 million tons. Even not five years, over the next 10 years, at least 15% to 20% of the single use plastics should be converted or should be replaced by PLA, such kind of initiative you expect from the government end, which will give a clear picture for you and the other companies or industries to come up with such kind of projects?

Vivek Saraogi: So, as I said in the beginning, if you just read what the budget has said, the new scheme is on the way. So, I hope all parts of it will get covered. They will encourage you to manufacture domestically and ensure that your domestic market is there, plus, nobody can dump. So, what happened in ethanol? You will not understand what can happen here. But if we replicate that, what did government say? Government said, I want 10% to begin with and then 20% from ethanol. And they said, I don't care about what the crude price is. So, when crude price went to zero or 10 or 20, our price was 60 for B-heavy, which was much higher than what they could have got from the market. When you go into mandates which are globally also in the same space of being supported through legislation to create demand, the concept is, I want so much of mixture as you said, because I want the climate change in place. Hence, what you said with the correct sort of demand and pricing will both come into play with support schemes. So, we feel very, very buoyant as we go into this. But that's how we see it. And you will see in the next three to six months a lot of schemes come out. I hope this scheme comes out with the new budget itself.

Kaustubh Pawaskar: And you don't expect pricing to be an issue because as ma'am said that it is two times the prices are higher compared to what the current traditional plastics being used in the market, so it should not be an issue for us, we expect the demand to be better for this product?



- Avantika Saraogi:** I think the demand is already there and growing without anything being done in terms of pricing firstly. This is because when there are bans in place and when there are EPRS in place, then plastic usage and comparison to fossil-based plastic is out the window. We are talking from a comparison with cloth with cardboard and those other things. And I think in terms of usability and pricing everything we should be good.
- Vivek Saraogi:** And another point which I said to begin with, for India to feed its people and replacing the fossil fuel plastic, you would initially only be able to provide for the caps and the covers and the straws which do not form a very reasonable sort of price shift if you have to buy a bottle. But having said that, yes, what Avantika said is valid and globally valid. So, people are with the same kind of fear with ethanol.
- Avantika Saraogi:** For example, even we would be competing with a glass bottle right, when it comes to water, for a single use plastic bottle. See, obviously we would be better than glass. So that's what I'm trying to say that do not compare because it does not exist the comparison anymore with traditional plastic.
- Moderator:** The next question is from the line of Gauri Anand from Old Bridge Asset Management.
- Gauri Anand:** I have two questions. One was, you happened to indicate that you will use sugar crystals or in place of crystals the alternate would be any form of starch. But when you look at the crystals, the form is of course one is liquid, one is solid, and the sucrose content also varies. So, if you can just help us how should we think about the fermentation perhaps from sugar crystals and perhaps from any form of starch, that's one? Second is I heard that you really can't share a lot of financial details, but in terms of funding this project, is there a debt-equity target in mind?
- Avantika Saraogi:** For the first question, the sugar crystal, obviously you will not put crystals into a fermenter, it has to be liquified and diluted in order to ferment it and similarly for starch. This is a non-issue. The capacity of starch is backward linked to what is required in terms of lactic acid and then PLA? So, this is a non-issue.
- Vivek Saraogi:** And we did explain that. And our thinking is 40% internal accruals and 60% debt.
- Moderator:** The next question is from the line of Tejas Sonawane from Asian Market Securities.
- Tejas Sonawane:** I have a couple of questions. Firstly, we have also done a minority investment and to Konkan Speciality aspect with that. So, I just wanted to understand what would be the role of you know Konkan Speciality in the entire PLA investment and our plan going forward? And secondly, you also indicated that there are a couple of other biodegradable plastics in the market as well. So, in terms of overall profitability comparing PLA to the other two products, where the PLA stand in terms of profitability and going forward, do we also have an option to produce the other two or three biodegradable options which you indicated instead of PLA?
- Avantika Saraogi:** So, I'll start with the role of Konkan Speciality. So just to put really like in short is that Konkan Speciality will have the ability to handle most of our PLA produced and they will also be creating the demand for the same if the need so arises. So now PLA is used in two ways. I'll try to explain this kind of difficult on the call. So, PLA is used neat and then PLA is used as a compound or a master batch. A master batch is as much as salt would be in food. So, it just lends some characteristics which are required, which are mixed with the neat PLA to create like let's say a cosmetic tub. Then it could be a bottle which is mostly made of neat PLA completely. Then there are compounds which are used for plastic bags which would let's say be in like a 60:40 ratio of PBAT and PLA. So, there are 'n' number of things like this depending on the use. The role of Konkan Speciality would be to make these recipes and solutions to all big or small companies who would like to utilize or who we touch to utilize our product. So, they along with others, it's not just them, we just happen to have invested in them because we find them to be the leading players in India, but even globally, there are many who would then become the enablers of PLA usage, make it something viable and easy for the end customer to use. I want to add in one very important point which I think we missed, is that the existing conversion and compounding landscape for traditional plastics can be easily utilized to make the same products with bioplastic. Now, other than this, your second question was, can we produce later on, the other bioplastics? So, at the moment, to be specific,



PBAT is produced from fossil-based sources, but it is biodegradable, therefore, it's called a bioplastic. So PBAT, I don't think is something that we would look at. PHA is made from glucose, it's a far more complex process and it is more expensive, and the hit rate is lesser, like the success rate it's harder to make. Probably like it is lesser. So, in terms of profitability, I would think that PLA should be the best because it is the largest manufactured bioplastic in the world today.

- Moderator:** The next question is from the line of Amit Kumar from Determine Investments.
- Amit Kumar:** Just one point. You mentioned the global PLA market is about 300,000 to 400,000 tonnes per annum right now. What is the kind of growth that we are seeing in this market right now?
- Avantika Saraogi:** So, there are figures ranging from 12% to 20% CAGR depending on which research report you see. So that we expect to keep it going. There are so many announcements of more PLA projects already announced, for example, LG Chemicals has announced in the US, Nature Works has announced in Thailand, Total Corbion has announced in France, I think there might be one or two in China, I'm not sure because China news is a bit difficult. So, I see growth coming into that same effect.
- Amit Kumar:** And in India, I would presume the market is going to be small, but it would have some market as you mentioned that Starbucks and Amul, few sort of players which are using this product. So, any sort of sense of what would be size of the market right now? Two and a half years means the project would be up and running fiscal 2027 and maybe full scale up in 2028, so we have some time. Where do you think the market size would be, I mean, organically I mean without sort of taking into account government actions in terms of dumping and all that? But organically, where do you think and where is the market now and where do you think it is going to be in three, four years in India?
- Avantika Saraogi:** To give you an accurate data for what the market is, today it's very difficult because PLA is not produced in India as we know, so we have to rely on import data. So, neat PLA import data is not accurate in terms of demand because most of the PLA coming into the country and being used is coming in terms of finished product, such as already made cups, already made straws, so impossible to gauge from this how much is really the demand, but we envisage it to be maybe already between 20,000, 30,000 tonnes without anything happening and it's growing. But don't bind me to that statement because it's not possible.
- Vivek Saraogi:** It's going to be very big in terms of our thinking. ESG compliance needs or wants and the mandate. All three combined in our view which will propel the size and the demand.
- Moderator:** The next question is from the line of Arshiya Shah from ET Now.
- Arshiya Shah:** This is not related to the project, but I have a question with respect to supply options looking for ethanol production. There were some reports which suggest cabinet secretary is going to hold a review meeting today. Anything that the management to look at, not related to the project, but it's important?
- Vivek Saraogi:** No, ma'am. This is a project call.
- Moderator:** Ladies and gentlemen, that was the last question for today. I would now like to hand the conference over to the management for closing comments. Over to you.
- Vivek Saraogi:** Thank you, everyone for being with us today and I hope we answered your questions to the best of our ability. We do remain sort of buoyant and very excited as we move into this space. And we shall continuously as and when the next update happens with the board, we shall concurrently have an investor call to keep you updated. Thank you.



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