

Plastic Waste Management
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Lecture - 14
Plastic Waste Management Rules (Contd.)

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Welcome back. So, we are on the module-4 for week-3, this is the 4th video for week-3. And we are continuing our discussion on Plastic Waste Management Rules as well as we look at the (Refer Time: 00:36) as we said in this week, since rules takes a little bit of time and we are trying to explain it in bit detail. As a same time, we are also like one of the goal we had was to compare this rule, look at the challenges in implementation of this rule. And also talked about the practicality of this rule, whether the things that is being proposed are really practical from whatever is the situation in the country. So, those discussions you saw in last three videos.

So, again the discussion will continue in this video and we also will start comparing the global rules and regulations with the Indian rules probably in this video and then continue that to the last video for this week. So, again if you have any question do feel free to put it on the discussion board, we are trying to answer the question back to you within 24 hours will try our best to do it and we have been doing it so far so, I hope that will continue to do that.

And discussion forum is the only place where you will get the questions answered, because we cannot answer individually e-mails for several thousand students. And at the same time, we do not have any WhatsApp group, there were some discussion board, we saw some of the in the discussion forum some students were trying to create a WhatsApp group.

If you want to create a WhatsApp group among yourself, you are free to do that, but that has nothing to do with NPTEL or from our side from the course delivery the team side, so that will be something of your own stuff. So, we are not supposed to get into those WhatsApp groups and other stuff. So, just wanted to let you know, so that is not an official thing, but you can do non official thing on your own among the group of students if you can contact them, we have no problem with that so, but any official information will always be through the discussion forum.

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So, continuing our discussion in terms of like there was different aspect of the rule. So, there are like each there is there is some labeling requirement as illustrated in this particular slide, there are certain labeling requirement of the products as per the plastic waste management rule. So, each plastic carry bag and multi-layered packaging shall have following information printed in English.

So, they have to have these information printed in English at the same time, I think that they should also although it is in English, but there should its kind of difficult with a in a

country like India, where we have so many different languages spoken. And so many different languages are used from say if you go from one state to another state, so we cannot have all those languages there, but at least I would Hindi is mostly in the north, and there are some south languages so I do not know if we can put some of the other languages in there as well, which will help otherwise many people may not understand English.

But, at the and as it says, but the information, so that is kind of a drawback, but again there are practical challenges of what you can do. So, you can as I said, you cannot have too many languages printed there. So, carry bag name has to be there the name of the company, which makes the carry bag, the registered number, the thickness. Because, remember where in terms of carry bag, what is banned now anything less than 40 microns. So, 50 microns and above that those bags you still see which are replacing those 40 microns.

So, if you go to a shop these days and they was giving you the thin bag, now they are giving you a little bit thicker bag which is 50 micron and above. So, which again is it from a environmental point of view is it a good move yes, but this is it really solving the problem in tarity in totality no, because if at 50 micron also there are certain dangerous associate like, there will be certain impact associated with that.

So, what we need to do is ultimately as I said as I have been saying many times, we have to start finding the alternative material which can replace plastic and can do all the functions that plastic does, then only we will have the problems solved. And the alternative material should not be a similar material, which will end up say from a plastic waste management we are discussing today and 10 years down the line I may have to for another course with some other add waste management, which is the material which replace plastic. So, it has to be greener material, it has to be environmental friendly material, so that is what we need to look at in a big picture in a like a in if you think about from a like a holistic point of view.

But in the meantime, we should focus on managing the plastic waste. So, as an plastic is not a problem, the plastic waste is a problem, so it is we have to start managing that plastic waste. And for the multi-layered packaging again the name, registered number of the manufacturer compostable plastic name and the certificate number. Very recently if I

would see if we can put that circular or that notice that came from central pollution control board on the discussion forum for you to see, it is a small let one page PDF, where they have listed certain companies which were selling compostable plastic, but actually does not have a certification of that.

So, as I says here that you need to have a certificate number, so but that certificate number is not there, because they really do not they did not get the certificate, they did not get their plastic. So, there will be lot of green washing happening that is what is called green washing. People will claim that things are green, but they may not be actually green, so that is why the regulation requires us to have certain checks and balances.

So, this certificate number, which is needed for compostable plastic was missing of from the product of those companies, and they were actually right now they have been black listed or banned you can say, they are not they cannot sell those products. So, because they are claiming those as a compostable plastic, but we do not know whether it is compostable or non-compostable, so that those issues needs to be there.

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Prescribed Authority (as per 'rule # 12')	
Pollution control boards & Pollution control committees	States & Union territories
• Enforcement of provisions for registration, manufacturing of plastic products, processing & disposal of plastic waste.	
Secretary in-charge of urban development	States & Union territories
• Enforcement of provisions relating to waste management by waste generators	
Concerned Gram panchayats	Rural areas (State or Union territories)
• Provisions relating to waste management by waste generator	

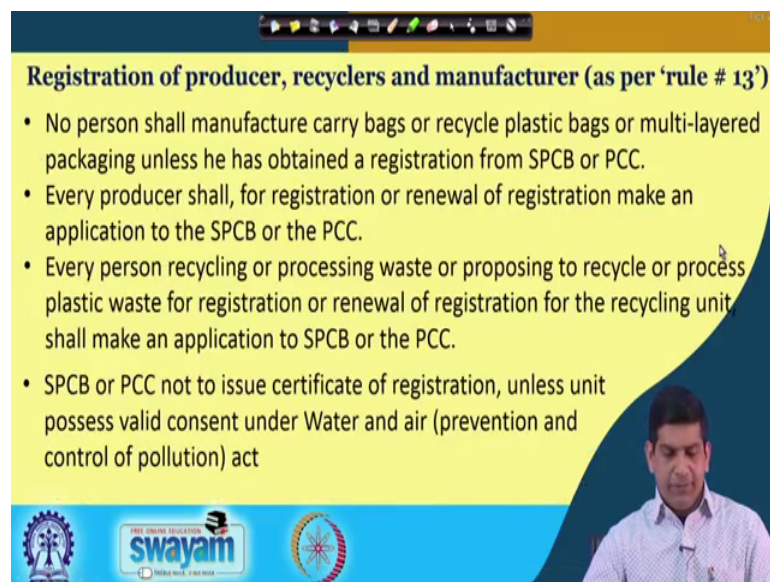
So, just now continuing with that discussion, if you look at in terms of what was the role of the different authorities, again we are putting a rule number here, this rule numbers are referring to the rules from where things are taken from that rules document. So, pollution control board and pollution control committee, they have certain rules so, they have

certain roles and responsibilities prescribed, they are they have certain authority. Secretary in charge of urban development, concerned gram panchayat so, just here we have just highlighted their main role or main responsibility you can see.

So, as per the pollution control board and the pollution control committee, they will enforce of the registration, manufacturing of plastic products processing and disposal of plastic waste. Urban development secretary say state as well as a union territory for all of them, this is a state and union territory and concerned gram panchayat is a state or a union territories.

So, enforcement of provisions related to waste management by waste generators. So, they have to urban development because the waste management actually comes under ministry of urban development. So, they have been asked to enforce the provision related to waste management. Gram panchayat again provisions related to waste management by waste generator, because urban development will do for the urban areas, gram panchayath will do it for the rural areas and we are seeing lot of plastic getting into rural area as well these days.

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Registration of producer, recyclers and manufacturer (as per 'rule # 13')

- No person shall manufacture carry bags or recycle plastic bags or multi-layered packaging unless he has obtained a registration from SPCB or PCC.
- Every producer shall, for registration or renewal of registration make an application to the SPCB or the PCC.
- Every person recycling or processing waste or proposing to recycle or process plastic waste for registration or renewal of registration for the recycling unit shall make an application to SPCB or the PCC.
- SPCB or PCC not to issue certificate of registration, unless unit possess valid consent under Water and air (prevention and control of pollution) act

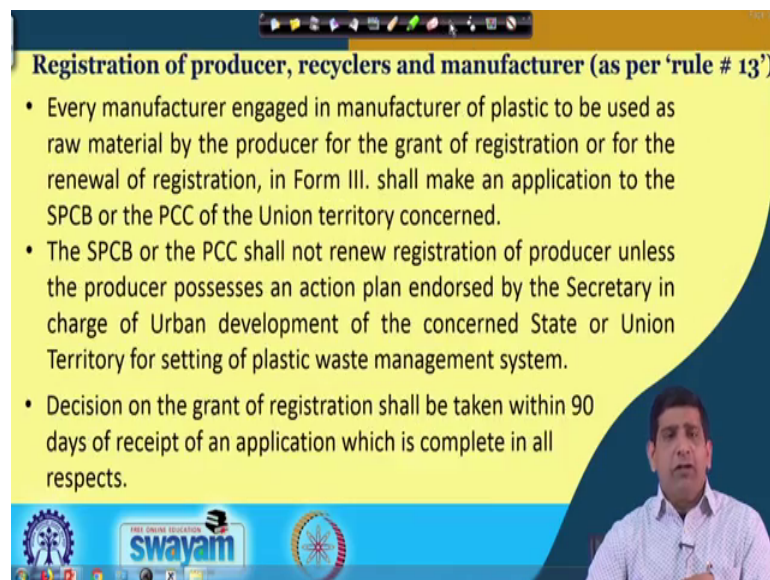
The slide features the 'swayam' logo at the bottom left and a video feed of a man in a light blue shirt at the bottom right.

So, there are what is how registration of producer recycler manufacturer, I am not going to take kind of read line the line from here, you can read it. You will have these slides as a reading material, but the bottom line is that of course any person, any company going

for like making the plastic, they have to get a registration has to obtain a registration from SPCB or pollution control committee.

Now, every they have to renew registration or renewal registration has to be make and if they will if every person recycling or processing waste or proposing to recycle a process waste, again they have to get the registration and renewal. SPCB and PCC will not issue certificate or renewal, unless the unit possess valid consent again water and air act. So, they have to make sure that they follow the water and air act and they get that consent. And then only they will issue registration done and these are pretty much common for other regulations to not only for plastic waste.

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Registration of producer, recyclers and manufacturer (as per 'rule # 13')

- Every manufacturer engaged in manufacturer of plastic to be used as raw material by the producer for the grant of registration or for the renewal of registration, in Form III. shall make an application to the SPCB or the PCC of the Union territory concerned.
- The SPCB or the PCC shall not renew registration of producer unless the producer possesses an action plan endorsed by the Secretary in charge of Urban development of the concerned State or Union Territory for setting of plastic waste management system.
- Decision on the grant of registration shall be taken within 90 days of receipt of an application which is complete in all respects.

The slide is part of a Swayam presentation, as indicated by the logo at the bottom. A presenter is visible in the bottom right corner of the slide frame.

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Registration of producer, recyclers and manufacturer (as per 'rule # 13')

- The registration granted under this rule shall initially be valid for a period of one year, unless revoked, suspended or cancelled and shall subsequently be granted for three years.
- State Pollution Control Board or the Pollution Control Committees shall not revoke, suspend or cancel registration without providing the opportunity of a hearing to the producer or person engaged in recycling or processing of plastic wastes.
- Every application for renewal of registration shall be made at least 120 days before the expiry of the validity of the registration certificate.

The slide features a yellow background with a blue header and footer. The footer includes logos for the Ministry of Environment, Government of India, and the Swayam logo. A presenter is visible in the bottom right corner.

And registration granted under the rule where valid for period of first it will be for 1 year and if its good for a 1 year, if they do good service can be extended for 3 years. And they shall not without providing say if somebody is doing something wrong, we have to give them an opportunity to come and present, you just cannot cancel the registration so, those things those provisions are there. Every application shall be made at least 120 days before the expiry of the validity.

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Responsibility of retailers and street (as per 'rule # 14')

Retailers or street vendors shall not sell or provide commodities to consumer in carry bags or plastic sheet or multi-layered packaging, which are not manufactured and labeled or marked, as per prescribed under these rules.

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Every retailers or street vendors selling or providing commodities in, plastic carry bags or multilayered packaging or plastic sheets or like or covers made of plastic sheets which are not manufactured or labelled or marked in accordance with these rules shall be liable to pay such fines as specified under the bye-laws of the local bodies.

The slide features a yellow background with a blue header and footer. The footer includes logos for the Ministry of Environment, Government of India, and the Swayam logo. A presenter is visible in the bottom right corner. There are also icons of a hand holding a bag and a 'FINE' sign.

So, if your registration is going to be expired is going to go away in 120 days, you have to do it before that so those kind of now what are the retailers and street vendors as to do as per rule number-14, they will not sell a provide commodities to consumer in carry bags or less than 40 microns, plastic sheet, multi-layered packaging, which are not manufactured or labeled as per prescribed rules.

So, they have to look at the whatever they buy as a packaging material as a carry bag, and other things that they do the customers. They have to make sure this company where they are buying from are registered, they are authentic not some fake company which has not registration with PCB and still selling those product. Every retailers selling in plastic carry bags covers made of plastic sheet, labeled according to this rules will liable to pay fine. So, pictures again kind of similar stuff that you see in other reports as well.

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The slide is titled "Explicit pricing of carry bags (as per 'rule # 15')". It contains three main points, each with an icon and text:

- REGISTER** (Icon: A red circle with a white hand pointing to a button): The shopkeepers and street vendors willing to provide plastic carry bags for dispensing any commodity shall register with local body. The local body shall, within a period of six months shall make provisions for such registration on payment of a minimum fees of Rs. 48,000 i.e. Rs.4000 p.m. as plastic waste management fees.
- REGISTERED** (Icon: A circular logo with a registered trademark symbol): Only the registered shopkeepers or street vendors shall be eligible to provide plastic carry bags for dispensing the commodities.
- Sustainability** (Icon: A green leaf): The local body shall utilize the amount paid by the customers for the carry bags exclusively for the sustainability of the waste management system within their jurisdictions.

At the bottom of the slide, there are logos for "swayam" and "INDIA RISE, CHANCE RISE". A video inset in the bottom right corner shows a man in a light blue shirt speaking.

So, explicit pricing of carry bag will be willing to provide carry bag dispensing any commodities a register with a local body. The local body with a period of six months payment of minimum fee of rupees 48,000 that is 4500 per month as a plastic waste management fee. Now, this I am not sure, I am may be for shop keepers also small shop keepers, it will be a big deal, because that is like too much of a money probably for them.

And especially for the street vendors, I am really street vendors to expect them to pay rupees 4000 per month. So, there is ambiguity in that rule whether the street vendors also will have to pay 4000 per month that is a lot of money for a street vendor to pay.

Because, a street vendor say if it makes 300, 400 rupees per day say 400 rupees per day of 30 days and with a day of, so that may comes down to 25 days or 25 days if you works in a month, so that is around 10,000 rupees. So, out of 10,000 thousand that is I am talking about his profit and all that.

And out of that if he has to pay 4000 as a so his monthly income goes down from 10,000 to 6000, so that is where actually we need to provide a cheaper alternative to plastic. Because, plastic is cheap plastic works really well, it does the function for which it is designed for that is why people use it. Nobody wants to harm the environment, if they do not have to. Because, if there is a alternative to plastic which is cheaper almost similar price, and then it is good for environment.

Everybody would like to go and use that, because but at the since plastic is so cheap and plastic is so convenient and that is why people use that. But, for street vendors to expect 4000 per month, I hope it is not my interpretation is wrong, I hope it is wrong, but the way it is written that is what it means that almost 4000, they will have to pay 4000 per month and that is will be a that is nobody will be able to do that.

And then there will be of course violation of the rules, there will be corruption of the polices police and all that, so its not so that is that is these are the things which when I say that rule needs to be realistic, rule cannot be just made and which cannot be really implemented. When people even if they want to follow may not be able to follow it, because its not practical.

Now, the only the registered shopkeepers street vendors will be eligible to provide plastic carry bag. The local body shall utilize the amount paid by the customer for the carry bag exclusively for the sustainability of the waste management system within their jurisdiction, now that is also there has to be a separate pool of money. Now, that is again is a problem many times the ULB budget, the budget of a urban local body is not divided into water waste water soil, solid waste and other stuff, its all now it has a combined budget.

Now, in the combined budget depending on the counselors, depending on who calls the shorts, who is more powerful and then whoever is more interest in what area certain projects get funded, certain project does not get funded. So, and there is lot of dynamics

goes there like political dynamics and other dynamics which goes in there well these decisions are made.

So, at in terms of getting this 4000 rupees and then trying to use it for waste management, its a good, its a plastic waste management, its a good move, but as long as there is a separate accounting separate budget. But, then there is requirement of a separate employee at ULB as well. To take care of those stuff and then the cost there will be associated cost associated with there will be cost associated with that so those things needs to be there.

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And there in rule-17 says every person engaged in recycling or processing has to provide an annual report, local body as to provide an annual report to SPCB, state pollution control board PCCs will make annual progress report. The annual report to CPCB and CPCB will provide that to central government so, there is lot of reporting requirement.

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The screenshot shows a presentation slide with a yellow and blue background. The title is 'Plastic Waste Management Rules, 2016: Heading on the right path but certain ambiguities remain'. Below the title, it says 'Aug 16, 2016' and 'Sustainability Outlook'. The main text discusses India's struggle with plastic waste, mentioning 15,342 tonnes generated daily and the government's 2016 rules. It highlights that while some states like Jharkhand and Himachal Pradesh are proactive, the real question is whether the country has moved beyond just 'professing' for plastic waste management. A highlighted box contains the text: 'PWM Rules 2016 provide a good framework for addressing the problem of plastic waste; however, they fail to address the key objective of reducing/ minimizing use of plastic in the first place.' Another box on the right says: 'PWM Rules 2016 provide a good framework for addressing the problem of plastic waste; however, they fail to address the key objective of reducing/minimizing use of plastic in the first place. Multi-stakeholder collaboration is needed for scalable solutions & to avoid adverse environmental impact of plastic waste.' The slide also features logos for 'swayam' and 'INDIA WISE, SKILL WISE' at the bottom.

So, again going back to that sustainability outlook discussion, it says heading on the right path, but certain ambiguity is remain. So, as I was trying to highlight as well, it is a good rule it is good state of rules, but there are practical challenges there of course and but there are certain ambiguities as well.

So, India is we are producing a lot of plastic waste, some of the newer data's actually suggest that you are producing much more than 15, 342 tons, it is close to something around more than 20,000 tons above the newer data suggest. The government notify plastic waste management rules addressing the 12 plastic waste. Some states like Jharkhand, Himachal Pradesh and Pune have certain example by managing waste at their respective level.

The real penetrating question is have you moved beyond just professing for plastic waste management as a professor or this article attempts to critically analyze a difference between the new rule as well as highlight the key steps, which needs to be taken for plastic waste management system in the country. So, it is a good framework in the terms of plastic waste, it try to reduce the waste is try to minimize the waste.

There is a multi-stake holder collaboration is needed for a scalable solution and to adverse and advice avoid adverse environmental impact of plastic waste. So, many of these aspects is captured in the plastic waste management rules so, it provides a good framework, but it does fail to address the cue objective of reducing and minimizing of

using of plastic at the first place. So, how to try to let the production of plastic waste being going down, so that part is not like a reduce reuse part. There is a little bit less emphasize waste management side is emphasized, but many of those things which is being emphasized is still needs to be any infrastructure needs to be developed.

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Multi-stakeholder collaboration is needed for scalable solutions:

Specifically, the latest rules need to be realistically tested perhaps first on local level then applied and implemented nationally for speedier and visible improvements. There is a need for EPR Policy to be comprehensively articulated, clear directions and incentives on integrating informal sector are required, online retail companies (producers) should also be brought under these PWM Rules ambit.

Multi-stakeholder collaborations including policy makers, ULBs, waste generators/end consumers, plastic industry, solution providers etc. needs to be encouraged to find a sustainable (both technically, financially and socially) approach for plastic waste management in India. Scalable solutions which will help in achieving zero significant adverse environmental impact of plastic waste are the need of the hour. Each stakeholder needs to fulfill their responsibilities well, like- innovators/solution providers should build on more plastic waste treatment technologies; industries, producers should implement more renewability/recyclability in their products; while ULBs and policy developers should create scalable models for plastic waste treatment/processing.

India needs to progress towards "Zero Waste Management System" which works with a philosophy of designing and managing products/processes, reducing the volume and toxicity of wastes and conserving and recovering all resources, instead of burning/burying them.

Sustainability Outlook

Free Online Education
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INDIA WISE, CHANGING WORLD

So, multi-stake collaborator collaboration is needed, it is so realistically tested, first on local level, then you apply to the national level. Need for EPR policy clear directions, comprehensive articulated, what does EPR policy you are talking about. And incentives on informal sector like how to get the informal sectors involve online retail companies should also be brought under this PMW plastic waste management rules.

Because, nowadays if you look at the online companies Amazon, Flip kart, and lot of other like Jabong, there is several there is several. If you go on online, there is several online portals which sell you products, which comes with lots of plastic packaging. Now, who is responsible for that in terms of EPR, this has to be someone responsible so, those clarities is needed.

And they has to be multi-level collaboration in the multi-stake holder collaboration, you will need to get policy makers, ULBs waste generators, plastic industry solution providers and they have to come together on a on a table. And try to find a possible technical solution or management solution for this problem. Especially, from a sustainability angle when we say we talk about economics, we talk about environmental

aspect which kind of the technological aspect as well and also at the same time the social aspect so, social aspect is also very very important.

So, steak each stake holders they to take full the responsibility and try to come up with better solution for plastic waste management, so that is an then it come to have a scalable model. So, right now I think in my so the focus of course we need to get on gradually facing out of those plastic components, which are creating new sense in the environment. We will not be able to face out the entire plastic like we its not that from 10 years from now there will be zero plastic in the in our usage plastic will still be there.

But, at least the once which are creating more problem like single use plastic, those microbials, micro plastics which are becoming a like a health hazard and environmental hazard, we need to gradually face them out and try to use alternative material which are cleaner material which are greener material. But, other than that for the other plastic containing a stuff plastic will continue to come to the waste stream and we have to have a good plastic waste management plan. So, that is the most of the stuff even for municipal solid waste or construction demolition waste or electronic waste that we kind of talk about that is kind of the area also work on as by research or consultancy or training teaching whatever.

So, what we have found is technology is there, waste is there, but taking a proper technology for proper waste and having that iteration that is the what is missing. And sometimes we try to make things to complicated, we try to make something to good and then in the process we basically end of failing.

So, we look for a smaller simpler solution to start with and then you add layer of complexities to that rather than start with a very complex solution, very which requires lot of technique technological input and other things. And then it becomes we cannot manage it we can get a foreign vendor and do it for us for the in the beginning by the after doing it the foreign vendor will take the money and go away and who will run it. So, I am not saying we cannot take anything from foreign, but at the same time we have to indianize it and make sure it works in the Indian condition, so that is very very important and those kind of things what we need to brain storm and come up with solution for this plastic waste as well.

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Plastic Waste Management (Amendment) Rules, 2018

- The amended rules recommend a central registration system for the registration of the producer, importer or brand owner.
- The rules clarify that the registration mechanisms should be automated and should take into account ease of doing business for producers, recyclers and manufacturers.

The slide features a yellow background with a dark blue header and footer. The header contains a navigation bar with icons. The footer includes the logos of the Ministry of Environment, Forest and Climate Change, the Swayam logo, and the Central Pollution Control Board (CPCB). A small video inset in the bottom right corner shows a man in a light blue shirt speaking.

So, there was a amendment in 2018 which recommended a central registration system producer, importer and brand owner, so that will kind of ease little bit or in terms of if it is a central registration system so rather than at the state level it even it can take cater to the entire country. So, because the waste product may be made in one state, but may be sold in some other state. So, those kind of things will be taken care of. And then even for the online stuff it might be taken care of as well. The rule clarifies the registration mechanisms should be automated and should take into account ease of doing business, so producer, recycler and all that.

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Plastic Waste Management (Amendment) Rules, 2018

- The centralised registration system will be evolved by Central Pollution Control Board (CPCB) for the registration of the producer, importer or brand owner.
- Producers with presence in more than two states need to apply for national registry with the Central Pollution Control Board, while, small producers or brand owners operating within one or two states require a state-level registration with the State Pollution Control Board.

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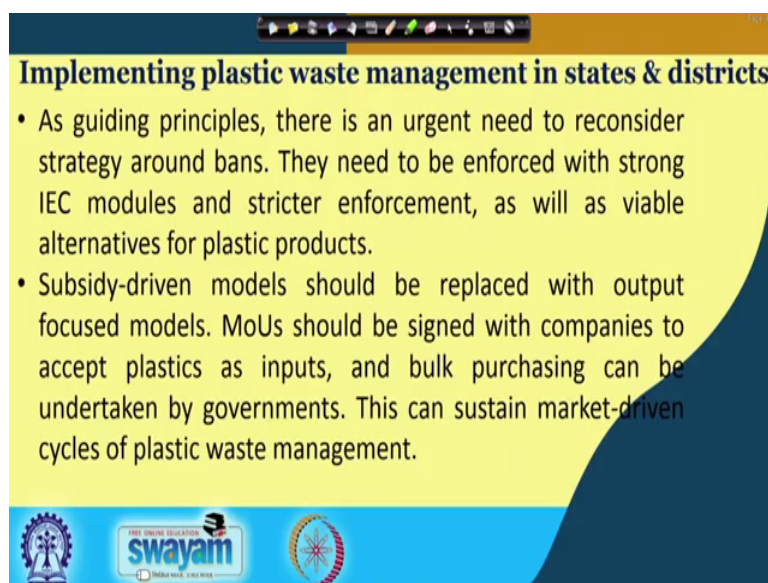
So, CPCB central CPCB will do it for the registration of the producer, importer and brand owners. Producers with presence of more than two states need to apply for national registry CPCB. While, small producers or brand owner operating within one state two states require a state-level registration with the State Pollution Control Board. So, you do not have to come to CPCB, but if you have operations at several states, it is better you go for the CPCB.

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So, and then there are certain guidelines has been developed as part of the Solid and Liquid Resource Management by SLRM. This is solid liquid resource management so, there are certain guiding principle, high-level guiding for state SBM directors, implementation framework for district collectors.

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Implementing plastic waste management in states & districts

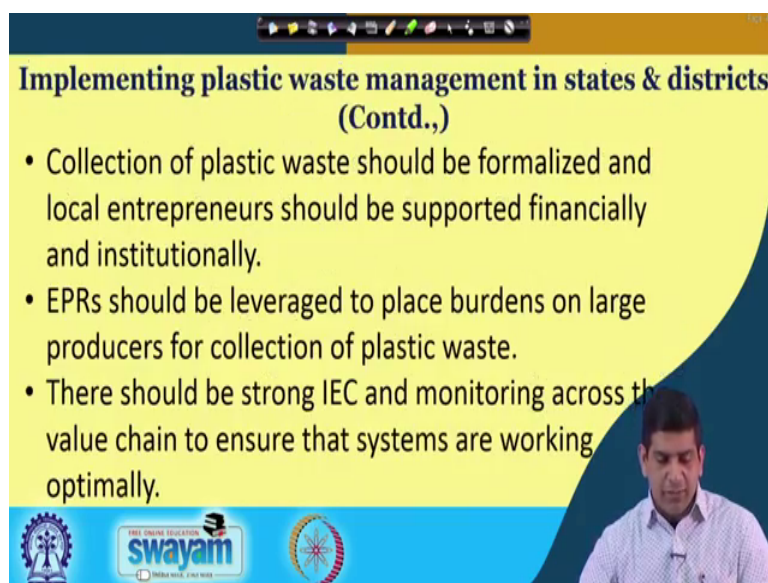
- As guiding principles, there is an urgent need to reconsider strategy around bans. They need to be enforced with strong IEC modules and stricter enforcement, as well as viable alternatives for plastic products.
- Subsidy-driven models should be replaced with output focused models. MoUs should be signed with companies to accept plastics as inputs, and bulk purchasing can be undertaken by governments. This can sustain market-driven cycles of plastic waste management.

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So, we will look at some of those stuffs. Say it says that is a guiding principle, there is an urgent need to reconsider strategy about bans. They need to be enforced with strong IEC modules, IEC module basically information modules and stricter enforcement as well as viable alternatives for plastic product. So, it should be viable alternatives we need to look at too, so what because just banning it is not going to work. And subsidy-driven model should be replaced with output focused model we should not take in subsidy driven model does not really work on a long term.

So, you cannot give subsidy forever. So, at that so you basically we shall look at more on a output focused model, where it is an self-sustain at least. MoUs should be signed with companies to accept plastic as input and bulk purchasing can be done by the governments, this can sustain market-driven cycles of plastic waste management and all that.

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Implementing plastic waste management in states & districts (Contd.,)

- Collection of plastic waste should be formalized and local entrepreneurs should be supported financially and institutionally.
- EPRs should be leveraged to place burdens on large producers for collection of plastic waste.
- There should be strong IEC and monitoring across the value chain to ensure that systems are working optimally.

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Collection of plastic waste should be formalized. Right now mostly it is in formal sector, local entrepreneurship should be supported. EPRS should be leveraged to place burdens on large producers for collection of plastic waste. There should be strong IEC that Information and Education Component and monitoring across the value chain to ensure the systems are working optimally so, we need to monitor the system as well.

So, essentially what it tries to tell you is that plastic waste should be right now it is mostly done by in formal sector we have to start looking at formalized in that sector as much as possible of course, there would be resistance because there is but those that those informal sector needs lot of training, lot of capacity building, so in terms of doing this things in a much better way, which they can do, but we need to provide them a training for that.

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Duties of citizens


Here are five things we all can do to hold governments accountable:

- **Contact your representatives** - Tweet at them, call them, or write letters and emails.
- **Ask your representatives to release strategies for combating plastic pollution** - For example, find out whether your country has banned microbeads in personal care products, and if they haven't, send a letter urging action.
- **Ask for a timeline** - Whether you ask your local government to ban plastic bags or your national government to ban microbeads, request a detailed timeline for implementation.

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Citizens can contact a representatives, tweet at them, call them, write letters and e mails, so to make the government accountable. Ask your representative to release the strategies for combining combating plastic pollution and how they will do it whether find out whether your country has banned microbeads in personal care product, if they have not, send a letter your urging action. Ask for a timeline - whether you ask your local government or ban plastic bags or national government to ban microbeads. So, there is a there has to be a timeline associated with that how long it will be done.

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Duties of citizens

- **Show up to community events** - After making your voice heard by writing your representative, show up to public forums, committee meetings, speaking events, and other gatherings your representatives hold locally. Tell your politicians your concerns about the plastic pollution crisis and listen to their responses.
- **Follow up** - Use the information you've gathered to ensure your representatives keep the commitments they've made. Call, email, and follow up again. Thank them when measures pass that reducing plastic pollution and protect the environment. If they fail to meet your expectations, tell them.

swayam

So, and then show up at the community events so show up at community events, stocked whenever there is some certain gathering in terms of getting people feedback, you should be there to give the feedback. So, again if each one of us does not contribute, then how we should not if we I am not contributing to it, I have no right to expect that other people will contribute to that. So, its basically we have to contribute if you really want to make our city and state and the country clean.

Follow up you get the information to ensure representative keep the commitment they made. Call, email, follow up again. Thank them when measures pass that reducing plastic pollution protect the and protect the environment. If they fail to meet your expectation, tell them that it was not done properly.

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So, that was kind of overall in terms of Indian waste management rules, Indian plastic waste management rules, we took a quite amount of time. And if you look at we covered like three and half videos more than nearly 4 videos on that. So, almost 2 hours of time discussing thread bear the plastic waste management rules of 2016. So, how I want you to really understand that I know the rules are not little bit boring sometimes, but we need to learn the rules.

So, please watch the videos again and again if you have to and then you have you will have the slides you can look at as a reading material as to and you can download those

slides as well. So, sorry download those waste management rules as well including hazardous waste management rules.

So, let us get start looking at for maybe a 5 minutes or 5-6 minutes or so whatever time is left for us in this particular video will look at this global rules and regulation and then we try to compare with how this compares with the Indian rules and regulation.

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United Nations SDGs

The United Nations 2030 Agenda for Sustainable Development is a “plan of action for people, planet and prosperity” consisting of 17 Sustainable Development Goals. UN Sustainable Development Goal (SDGs) 14 aims to “Conserve and sustainably use the oceans, seas and marine resources for sustainable development”. In September 2015, 193 Member States, including the UK, adopted this Agenda and committed themselves to working “tirelessly for the full implementation of this Agenda by 2030”.

SDG14 includes the target of:
By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution

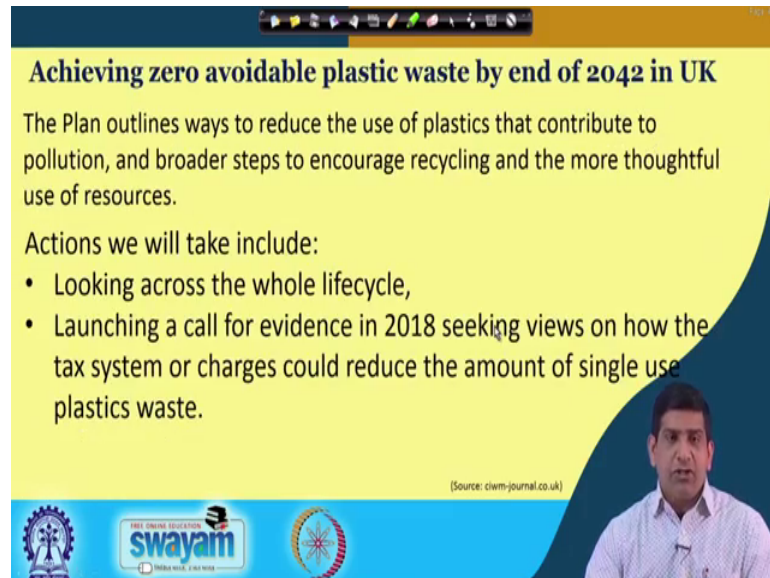
Logos at the bottom: United Nations, Swayam, and India.

So, in terms of the global rules and regulation for plastic waste you know its kind of United Nation as we all know has a Sustainable Development Goals SDGs. So, SDGs is a plan for action for people actually for plan people, planet and prosperity, so PVP there, consisting of 17 sustainable development goal and out of that goal 14 aims to conserve and sustainably use the oceans seas and marine resources for sustainable development, so that is was in like goal number 14 that is sustainable development goal.

So, in September 2015, 193 member states including UK, adopted this agenda and committed themselves to work tirelessly for the full implementation of this agenda by 2030. Now, 14 includes the target of that by 2025, we will prevent and significantly reduce marine pollution of all kinds in particular from land based activities including marine debris and nutrient pollution, so that is what its a they want to reduce the marine pollution, land-based debris and that has lot of plastics which we you kind of already know from some of the recent papers and kind of what how the past is getting into the

water, we cannot discuss that as well. So, by 2025, the goal is to significantly reduce that which is we have to see how potentially that can be done.

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Achieving zero avoidable plastic waste by end of 2042 in UK

The Plan outlines ways to reduce the use of plastics that contribute to pollution, and broader steps to encourage recycling and the more thoughtful use of resources.

Actions we will take include:

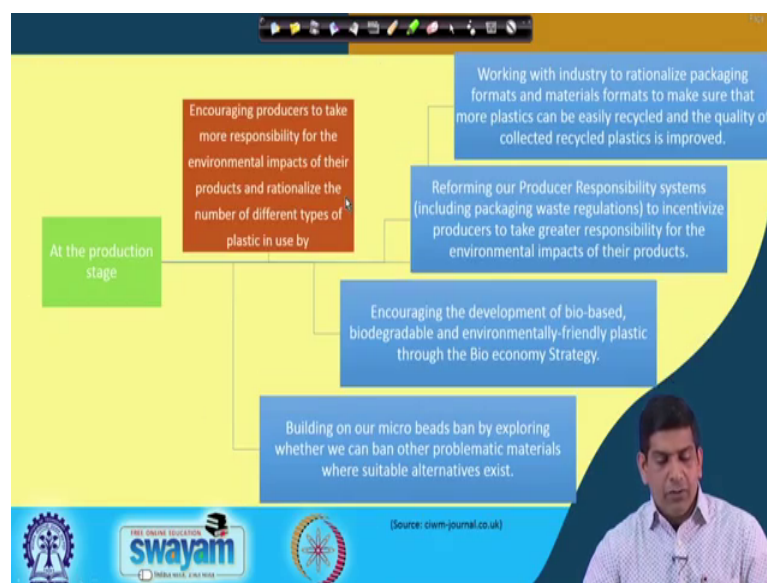
- Looking across the whole lifecycle,
- Launching a call for evidence in 2018 seeking views on how the tax system or charges could reduce the amount of single use plastics waste.

(Source: ciwm-journal.co.uk)

Logos at the bottom: Swamyam, and other organizational logos.

So, that is what United Nations big picture goal and taking that goal many countries are working on their regulation. So, in UK for example, by the end of 2042, there are looking and achieving zero avoidable plastic waste. So, the plan outlines ways to reduce the plastic that contribute to pollution and broader steps to encourage recycling and the more thoughtful use of resources. Action like looking across the whole lifecycle so, they are looking at the life cycle of the whole process. Launching a call for evidence in 2018 seeking views on how the tax system or changes could reduce the amount of single use plastic waste, so should be is (Refer Time: 28:17) charging and all that so, that was kind of focus there.

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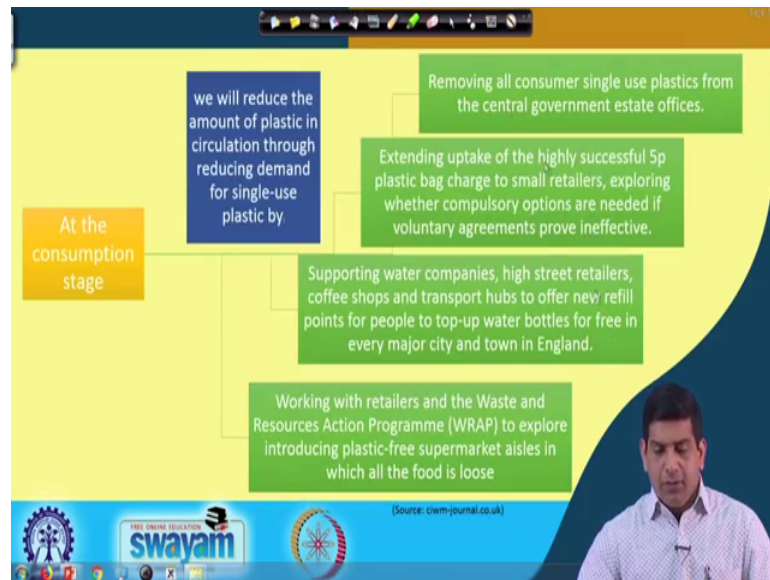
And so some of the in terms of little bit of summary of that they have in terms of rules at the production stage, they talk about encouraging producers to take more responsibility for the environmental impact of their products. It is kind of part of EPR working with industries to rationalize packaging, formats and material, make sure the more plastic can be easily recycled, so that is what these kind of interaction needs to happen in our country as well, where we get these industry involved in the same room with stakeholders with the like government authorities.

Where we try to see whether it can be; whether it can be easily recycled, what if we do we have to change the process of a in this industries a little bit, so that the this plastic when it comes to the waste stream is easily recyclable, then what it is today especially for mixed plastic and all that. Reforming our producer responsibility system to incentivize producers to take greater responsibility for the environmental impact. Encourage and development of bio-based, biodegradable and environmental-friendly plastic through bio economy strategy.

Again this is we have done some work in this area 100 percent bio degradable plastic is very difficult to achieve because its strength is not that great, but there are studies are still going on, lot of studies are going on around the world to find that good mix where we can use it as a like a structural material and all that.

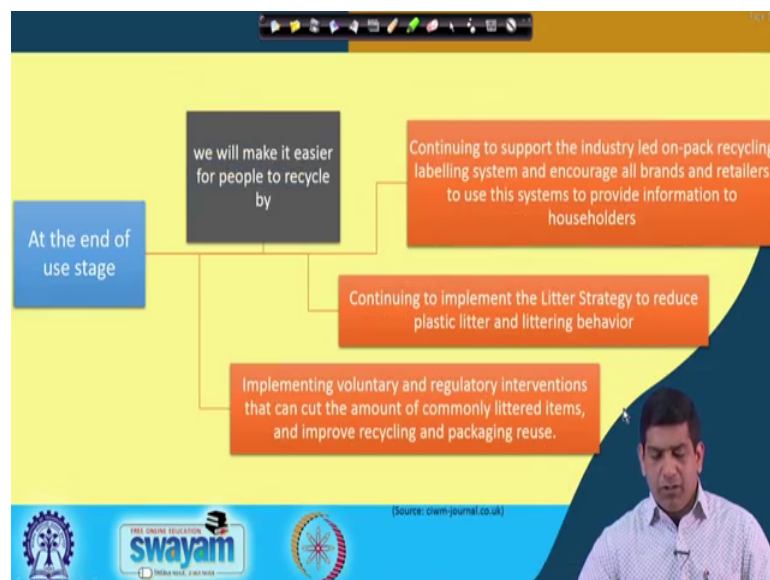
Micro beads ban by exploring whether we can ban other problematic materials where suitable alternative exist, may be it depends if it has risk then we can do it, otherwise we do not have to do it.

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So, you saw European Union kind of big picture and then you saw the UK as well.

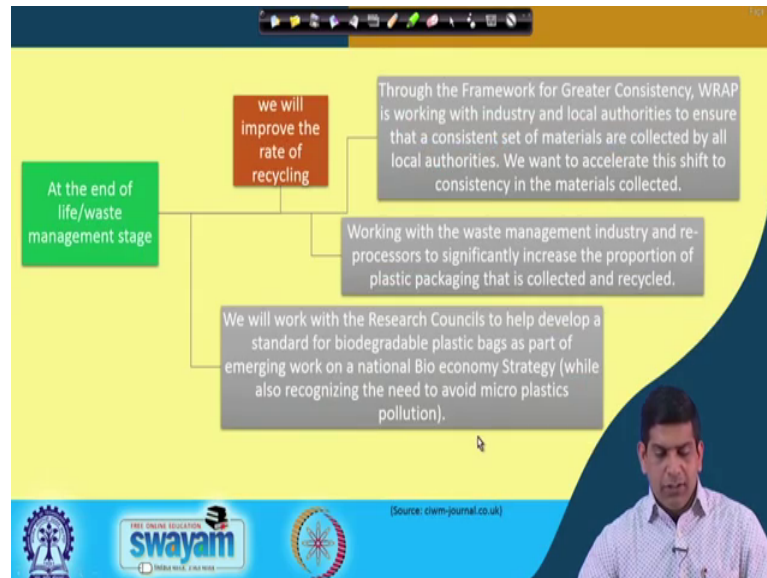
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Continuing with that when says that at the end of use stage make we will make it easier to people to recycle by continuing to support the industry led on-pack recycling labeling system, so that is or continuing to implement the litter strategy, implementing voluntarily

and regular intervention to that look at that can cut the amount of commonly littered items and improve recycling so, those things are going on.

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And at the end of life of waste management, we look focus on increase the rate of recycling with work with the industries, you want to accelerate this shift working with the waste management industry and re processors to increase the proportion of plastic packaging, talk with the research council biodegradable plastic so, those are lot of things that can be done.

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UK supermarkets and food companies launched a new voluntary pledge to cut plastic packaging on Thursday as ministers consider forcing them to pay more towards collecting and recycling the waste they produce.

In a first response to a growing public backlash against the huge volumes of plastic rubbish, most of the UK's largest supermarkets signed up to support the UK Plastics Pact - an industry-wide initiative which says it aims to transform packaging and reduce avoidable plastic waste.

Tesco, Sainsbury's, Morrisons, Aldi, Lidl and Waitrose are among the 42 businesses so far supporting the new pledge, which includes an aspiration that by 2025 all plastic packaging can be reused, recycled or composted.

But the same supermarkets have consistently refused to reveal how much plastic packaging they put onto the market, or commit to paying more to recycle it, in a system which is shrouded in secrecy.

The environment secretary, Michael Gove, who is to address a launch event tonight, said: "Our ambition to eliminate avoidable plastic waste will only be realised if government, businesses and the public work together."

"Industry action can prevent excess plastic reaching our supermarket shelves in the first place. I am delighted to see so many businesses sign up to this pact and I hope others will soon follow suit."

UK supermarkets launch voluntary pledge to cut plastic packaging

Critics say retailers can pick and choose whether to sign up to Plastics Pact, a series of pledges that have no enforcement mechanism

But critics note that the new plastics pact is voluntary and that the pledge comes with no enforcement mechanism. The pledge fails to commit to removing all single-use packaging, instead promising to remove "problematic or unnecessary" single-use plastic by 2025.

The Guardian

So, let us kind of a stop over here and will continue this discussion on we talked about. So, in this particular video we looked at we finally, completed the remaining part of Indian waste management rules and then we have a started looking at some of these global rules and you will see that companies in between the Indian rules and a global rules. So, in the next video, we will continue to do that and that will be the last video for this particular week on regulations related to plastic waste management.

So, again thank you very much for being part of this course and I hope you are enjoying it you are getting what you wanted. If you can if you have any suggestions, any feedback, feel free to put it on the discussion board. So, thank you and see you again in the next video.