

# Transcript of the Conversation on An Era of Transformation

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**Introduction by the Moderator Dasho Kinley Dorji:** Ladies and gentlemen, we call this a conversation because it is a very informal gathering. Through the Druk Journal, we hope to bring together like-minded people to read, think, and talk, fostering more meaningful discussions. The Druk Journal has received a lot of positive feedback from scholars and academics, and we know a number of Bhutanese students and scholars who have completed their PhDs using the Druk Journal because we don't have much-written literature on Bhutan. So what we do is, we pick a theme of national importance for each issue with the idea to encourage national conversation around these topics. The 19th issue is on the theme of "An Era of Transformation" in Bhutan. We have four speakers who have contributed articles to this issue of the journal: Philip Schellekens, Chief Economist, UNDP, Katsu Masaki, Faculty Member from Konan University, Japan, Namgyal T. Gyaltshen, Analyst, Druk Holding & Investment, and Tshering Nidup, Programme Lead, Druk Gyalpo's Institute.

**Moderator Dasho Kinley Dorji:** We have many speakers here. And this is important because what we find, in general, as we do issue after issue, there are more and more young people coming... very interesting, very informed, very articulate people. And here we have Namgyal, who works with DHI, she's talking about governance... government with a focus on digital technology, which is a priority. And this is coming together. So Namgay, share some of your thoughts on this.

**Namgyal T. Gyeltshen:** As Dasho mentioned, my name is Namgyal la. I work with DHI at the Department of Innovation and Technology. I work primarily across the Jigme Namgyal Wangchuck Fab Lab and the Strategic Technology Planning Division. And so a lot of what the division intends to do is, it aims to build capacity around technology in the country lab. So we also have a research centre that's focused on building the technology. So we're kind of a department that approaches technology from all angles, from actually building it to the capacity development that does involve the lab. So a lot of what I've written for the journal is actually based on my experience in the past four years working with InnoTech. We've been attempting to work not only in the local technology and innovation space but also in trying to build it into an ecosystem lab. So my article can be broadly summarised into these three points. I've thought a lot about the main points of the article because it's quite a long piece. So first, as Dasho has mentioned, I tried to explore the adoption of technology. And not just the adoption of technology, but our willingness and openness to technology as a nation, starting from the past decade to now. And in doing so, I think I've come across technology in two central themes.

The first is, that we've started to view technology as a new pathway for economic growth, but we've also started to adopt technology in governance. And in exploring these two themes, I think inclusion remains a very central theme. When we're looking at technology, we want to

make sure that technology is taking on the responsibility of bridging divides versus actually widening the gaps that already exist in society. So that's a big economy that we're attempting to address. And then, finally, just informed by the work and how the technology space in the country has grown, I've touched upon the challenges that we'll need to overcome to be able to leverage technology for the future.

**Moderator Dasho Kinley Dorji:** Can we just briefly talk about that? The challenges for tomorrow, in terms of infrastructure and connectivity - what we are doing? Can we (Bhutan) expect things to improve?

**Namgyal T. Gyaltsen:** I feel like with the focus that we're placing on technology there needs to be infrastructure improvements. If we can't get Zoom to work on our connectivity, then there needs to be solutions there, because we can't really expect to build future technology solutions on our existing foundation. So that's what we're seeing. And then in terms of education and skill? So I think in the past four years, at least, we've seen a lot of workshops and online opportunities for people to get skilled and involved in technology. But we're also still kind of separating STEM from humanities and arts. So the focus that we're placing on STEM is kind of putting it so that technology is a topic that's taught, rather than a tool that's leveraged by students. So I think that's also something that needs to be addressed.

**Moderator Dasho Kinley Dorji:** Okay, good. Nicely summarised. Does anyone want to ask Namgyal or ask each other or express some views on this? Governance? Technology?

**Question from the floor:** Are you all involved in any way in the recruitment of STEM teachers, or is it just education?

**Namgyal T. Gyaltsen:** No, we're right now trying to get involved formally with education, but we're mainly designing informal spaces for people to engage with technology.

**Question:** So what are these informal spaces?

**Namgyal T. Gyaltsen:** The Superfab Lab is actually playing a big part there. We're bringing in students, regardless of whether they're interested in science, commerce, or arts, and then teaching them how to use the machines to kind of help their classroom learning.

**Moderator Dasho Kinley Dorji:** You know, when we talk about technology and governance, what comes to mind immediately is NDI (National Digital Identity). And I know we have someone with some NDI background here. Is it working? NDI?

**Dev Raj Dungana (NDI):** It's a question that we get every day, not just in person, but also on social media. And I can say that NDI works, but there are some limitations at the moment. It's a very nascent technology, and we are working towards expanding its potential at the moment. And in the days and months to come, I believe that it will be a significant step.

**Moderator Dasho Kinley Dorji:** Okay, and I know the questions you are referring to, one is talking about whether we are safe now. What's the security level? NDI means are we putting ourselves out there and becoming vulnerable?

**Dev Raj Dungana (NDI):** Just to touch a little bit on the technology that we use at the moment with NDI, the core service, the core technology is on blockchain now. So when we just hear the word blockchain, we think about cryptocurrency, like Bitcoin and so on and so forth. And when it comes to leveraging blockchain for identity, it just so happens that it allows individuals to own their data.

So any kind of data that you will be receiving in the NDI app, you can share it with the agencies that we have integrated with. For example, we have integrated with the Bank of Bhutan and Telecom, and there are many G2C services. So if you want to share your data, it's up to you. And there are features like if you want to either share or deny data. So these kinds of features and functionalities in the app allow people to own their data and have some sort of freedom as to where they want to share and to whom they want to share it.

**Comment from the floor:** My question is in terms of NDI and when you talk about technology, it's very enticing. My question particularly is when you design, who are you designing it for? Because just to give you an example, even when we went on NDI the first time, you needed a phone and a laptop. You cannot expect people in villages to have that. So I think that was the first challenge I noticed. And secondly, even with NDI, wherever you go, you put your information online, you make your applications online, but you still have to submit paper applications. So are we really going online? And of course, the third point I would want to make is how secure is our data going to be. And especially we are talking about in the kind of governance ecosystem that we work in, data can be used positively as well as there can be negative implications as well. We have heard of stories around the world where information has been used for not very good causes as well. So I think learning from those perhaps when we talk about taking things online or going digital, I think these are some issues that need to be talked about. And also, the fourth one is in terms of education. During COVID itself, there were many applications taken online for our students. We talk about the digital divide. It is there and it's not only a divide between Thimphu and rural places in Lhuentse or Trashigang. You can actually see that digital divide within Thimphu here and as close as Hongtsho area. There are some pockets where there is no digital penetration and children suffer there. Perhaps I think it's going to be the same unless we try to get ourselves on the ground. And do, maybe what we call digital design thinking.

**Moderator Dasho Kinley Dorji:** Okay, so you don't need to answer all but in brief. This wasn't planned.

**Dev Raj Dungana (NDI):** I'm not going to be in the defensive mode. So it is just, but I'll just be a little bit defensive. It's a very nascent technology. It's been about a little more than 6 months that we have been delivering our services nationwide at a national scale. And when it comes to inclusion, to allow people to access services through NDI, we have other features coming in. We

have the role of partnership and controllership where if the parents are illiterate, digitally illiterate, then the children can act on their behalf. And when it comes to digital privacy and security, we say everywhere that we are secure by design. But I'll pass on the feedback.

**Moderator Dasho Kinley Dorji:** I think we've got the idea. There's pressure. And I think it's healthy pressure. So I think we have to keep up the conversation. We have to keep up the questions. Do you have one or two points more to finish with?

**Namgyal T Gyaltsen:** Yes, I think I have a few more slides. But I think the discussion has kind of encompassed all these points already. So I think the digital divide has already been kind of addressed. And this is something that we've been debating on. So that's kind of where, within the tech at least, why we're attempting to even build capacity around technology. We can't just assume by introducing services such as NDI that everyone is going to get on board and that the services are going to be beneficial to all. So what we're trying to do is we're trying to, again, through like these informal spaces, trying to expose the citizens to technology in a way that they can engage with it. There's also a human capital mismatch that I wanted to touch upon. Just by virtue of encouraging STEM in our schools, we're kind of pushing students towards careers in STEM without really first taking stock or mapping out what industries and jobs are available to them after graduation. So we end up actually losing talent in the long run. And then, of course, infrastructure and connectivity are a big theme this morning.

**Moderator Dasho Kinley Dorji:** Yes, education. I know Tshering will later be talking about education also.

**Namgyal T Gyaltsen:** So I think all of this points to, our biggest goal is a very strong national strategy around technology. It seems that there are a lot of good interventions, a lot of good initiatives happening on the ground, but if there's a strong overarching strategy that can connect these initiatives to kind of feed off of each other, then we're able to build a foundation for future technology projects.

**Moderator Dasho Kinley Dorji:** Okay, thank you. So we're going to come back with questions. We have a very interesting group here, so when you have some comments, please just be quick, just points, okay? We're going to Masaki-san here, our friend. He's from Japan, and he was the first to get here this morning.

Masaki-san, we know he knows Bhutan. He has worked in Shinkar village in Bumthang with the people and has done some very interesting projects, involving the people, and we were very happy when he proposed his paper, we are talking about the GMC, you know, Gelephu Mindfulness City Project and his approach is rural Bhutan. What's rural Bhutan getting out of this? So that is very interesting. I think that's something we encourage very much. So thank you, Masaki-san. So we'll give you six minutes.

**Katsu Masaki:** Seven minutes? Good morning, everyone. My name is Masaki. I teach at a small private university in Japan. I'm on one year's leave of absence now. I'm attached to BCCI

(Bhutan Chamber of Commerce and Industry) working with them to start a small JICA-funded project to promote rural CSIs in Bhutan this year. Now, as Dasho said, I was previously also involved in a small project assisting people in Shingkar, Ura, in Bumthang, to start an MPU, a Milk Processing Unit. One Shingkar villager a while ago said, you know, the project helped quite a bit because we used to generously give milk, cheese, and butter to relatives and friends. But now we learn to use milk purposefully and efficiently because they supply milk every morning. And then to earn a bigger and stable income. That's what he said to me.

You know, this kind of implies the importance of using resources purposefully and efficiently, isn't it? But then, interestingly, the case of Shinkar shows that actually both are important. You know, giving generously and also using resources efficiently and purposefully because Shinkar is a highland community. It is quite challenging to operate an MPU there compared to those at lower altitudes and also those closer to cities and towns. But then to overcome the difficulties, you know, what they did was to help each other generously, give generously to each other so that they can use milk purposefully and efficiently. So what I wanted to say to you is that both elements, helping each other and also thinking purposefully and efficiently, are important.

And then, you know, I think this lesson, that both elements are important, can be applied to the Gelephu Mindfulness City. Of course, I mean, it is very important that resources are used very efficiently and purposefully through the concentration of economic activities in the city so that the project can cultivate economies of scale and efficiency. But then, at the same time, I feel that it is also very important that redistribution measures will also be adopted so that the benefits will also be shared generously among surrounding rural communities.

You know, I think some of you might be asking yourself in your mind that if you try to do both, I mean, combining the development of the city with the redistribution of the means of livelihood among the people in surrounding areas may put the brakes on economic growth. But then, the whole purpose of the Gelephu Mindfulness City is to make the city a hub for economic growth. But then, of course, it is very important to bring together people with ideas, knowledge, and resources in the central location so that the project can use their resources efficiently and purposefully.

But then, in the long run, for the economy to become really resilient, robust, and sustainable, I think that the redistribution of the means of livelihood among a broader segment of the population is also very important. I'm talking based on my experience in Japan. I'm sure most of you know about the rise and fall of the Japanese economy. And the issue is really at the root of our problems in my society. I must admit. So, I hope that the prosperity of the city will spill over to surrounding areas.

So the surrounding areas will supply agricultural produce, timber, and perhaps labour. But then, there is a limit to how much, you know, the benefit will spill over to surrounding areas. But I think that the surrounding rural community should try not only on their economic linkages with the city, but also it's very important that they thrive on their own non-economic charms, such as landscape, cultural heritage, social fabric, and so on and so forth. And then I refer to in my

paper to the notion of placemaking. You know, the rural community should be made, should be assisted to be a place with a sense, whereby residents not only seek to enhance their economic security but also take pride in their own locality.

And then I think that can be done through various means, such as organic farming, cooperatives, farmer's market, farm stays, you name it, you know, this can go on. And I think His Majesty said in one of his speeches on the last National Day that the Gelephu Mindfulness City project should be one of a kind, anchored on the vision and values of GNH. The mainstay of GNH is to promote a just and harmonious society, isn't it? And I think it's very important to also pay attention to surrounding rural communities so that the city and surrounding area prosper, on equal footing. That's all I wanted to say today.

**Moderator Dasho Kinley Dorji:** Thank you very much. I think Masaki-san has brought up some very important issues, particularly, I have to also share my thoughts. When I hear the word Gelephu, I hear Bhutan, so I think rural communities are definitely not left outside. In fact, actually, one of the earliest feedback we had was from a farmer from Gasa. "So what happens to us?" And then the answer was that here's what Gasa needs to do. Talk about organic farming now. Niche. Don't compete with Jaigon in producing potatoes. But niche products. And here's your market. The new market is right here itself. So that's the kind of conversation I think that we will hear more and more. Thank you. Does anyone have any comments? Maybe a question.

**Comment from the floor:** So I'm Chenchu. I had seven years of my career at BCMD, and it has been a wonderful learning journey for me. And when I say this, I don't mean to just praise BCMD. But what has been discussed here, and especially about the mindfulness city and you advocating for the need for equal footing of communities around the city, I think that is what GNH is. And I'm so thankful for that. And as a person outside of the civil service, mindfulness city is a vision of His Majesty. But what that vision really entails and how that is going to be executed is beyond my comprehension because I was never engaged. And this is a forum that is giving me this opportunity to have this conversation. And I'm so glad to hear you talk about, you know, mindfulness and GNH because a couple of years back, I was going through a depressive mood, especially after the pandemic and all this reform. And in my mind, I was thinking we were going the capitalist way. And with the vision for Mindfulness City, I think there is a new turn for Bhutan to go back to our roots. So I'm so thankful for this opportunity to listen. That's all. Thank you.

**Moderator Dasho Kinley Dorji:** Thank you, Chenchu. Yes, please.

**Namgyal T Gyaltsen:** I think the idea of a distributed economy and just equal opportunities for rural and urban communities is very fitting, especially on the heels of the transformation and also the Gelephu city. Beyond all of the excitement, I think the majority of citizens are feeling a fear of being left behind. So I think this idea that Masaki-san is presenting is very apt with how Bhutanese citizens are currently feeling. My question, I think, lies more in terms of the practicality. So what kind of connections do you see that need to be built? What kind of infrastructure investments need to happen in order to make this model a success in Bhutan?

**Katsu Masaki:** You caught me. You know, I may not be asking you the question directly, but oftentimes when I talk about how vibrant the community is in Shinkhar, in Ura, they say that, okay, yeah, that may be a special case, but in general it's very difficult in many rural communities to get them to engage in group management. That's what I often hear. And even I cited the report by the College of Natural Resources in my paper. They point out there are many, many failed attempts to assist rural communities to start their cooperative groups and group activities. But then the report, the same report also points out that as much as there are failed attempts, there are successful examples.

You know, I refer to the notion of creative tension. Because not only Bhutanese people but also Japanese people, as human beings, we tend to deflect attention away from the challenge. And I know it's going to be challenging, what I said, to put that into practice. But then I think we should be aware that we should not deflect our attention from the challenge. But then, we should value creative tension. So we also look at it from a different angle. You know, when I visited the different rural communities, and now I'm preparing for another JICA project in another place in Bhutan, and it's very interesting. Because I visit every household in the village, although I don't speak the language, I go with an interpreter. But it takes time. But then, you know, there are many interesting people. So I think not only in Bhutan, but also in Japan, what is talked about, especially in the city or at the higher level, and what is happening on the ground are different. So I think there are many, many chances.

**Moderator Dasho Kinley Dorji:** Thank you, you also reminded me of a work I couldn't remember at that time, "Creative Tension", I think that's what we need. So please keep up your questions. Okay, yes. Philip is online. I think we had better go to Bangkok. Okay, so please, we were just referring to the rethinking that's needed to take Bhutan forward. I think your topic is very much relevant, you know, the Prime Minister's recent interviews and speeches have all emphasised the economy. And by the way, the Prime Minister has appreciated your paper and said he looks forward to working with UNDP. So please share some of your thoughts with us.

**Philip Schellekens:** Yeah, so it was a real pleasure to visit Bhutan for the first time. So let me briefly sort of add a few comments about the paper itself. Bhutan is facing an existential moment for several reasons. You know, we have to recognise that Bhutan has made a lot of progress in the past. Social indicators have improved dramatically. Primary health care coverage, life expectancy, poverty, out slashed multidimensional poverty. But there are still large disparities, such as the rural divide, the income inequality, as in other countries in the region. And recently there's been great disruption because of the pandemic. But the point is that look, this is in a way water under the bridge. We are where we are, and now we have to look to the future. The reality is that on the SDG agenda, Bhutan is well behind the schedule.

I think I'm trying to look up the data point here. So currently only 29% of the SDG targets have been met. This is not specific to Bhutan. It applies to the whole Asia-Pacific region. We've only reached about 17% of the targets of the SDGs regionally. And obviously, the pandemic disruptions and the overall high level of ambition of the SDGs explain in part the lack of full

progress. But clearly, there is a gap between achievement and aspiration. So that is one reason why we really need to rethink the approach. We need to fill that aspiration gap.

The second point and that has to do with why I say that Bhutan faces an existential moment, is that human insecurity is at an all-time high, particularly job insecurity. And that has manifested itself in a rather intense brain drain that affects all segments of society, the public sector, and the private sector. And that really needs to be addressed by offering better opportunities for economic growth, and especially job creation, and job creation of the right kind.

Not just any job, but jobs that offer an upward potential. But the third factor is that looking ahead, realising the progress that Bhutan still has to make will become more difficult than it was in the past. So if it was difficult in the past, it will almost certainly become more difficult in the future on the current trend scenario.

And that is because the future is expected to be far more turbulent than it was. We have existential risks emanating from climate change and pandemics. We have new risks to the drivers of economic growth and job creation.

We worry about these new patterns in globalisation, geopolitical tensions, and China slowing down. We worry about new technologies, AI. In the past, we thought that export-led industrialisation was the model of development. That's how Japan developed. That's how Taiwan, Hong Kong, Singapore, Korea, afterward the Southeast Asian tigers, Cambodia, everyone is trying to pursue that right now, all the way down to Africa. But with globalisation becoming less of a tailwind and more of a headwind, these export-oriented strategies are becoming more difficult. Now on top of that, we have AI. So when we started to worry about export-led industrialisation within some of its potency, we started to think about maybe services will come to the rescue, tradable services. But now we worry about AI.

What about the call centers in the Philippines or India? If AI is going to replace them, so we worry about it. So technological change and new trends in globalisation are creating new issues that were not there before. And then thirdly, the democratic backsliding we have seen around the region, greater polarisation, and populism, on the back of high inequality, are creating some issues as well.

So these are three risk clusters, existential threats, new risks to growth and job creation, and then governance issues that are combined. Now this is not to say that the future is bleak for Bhutan. Bhutan has amazing cultural and environmental assets. It can lead to environmental stewardship and attract green investments. Even though we worry about globalisation, Bhutan's proximity to India and China is a great asset. We predict that between now and the end of 2030, about 80% of the growth in the global middle class will occur in Asia-Pacific, and most of that is driven by India, and to a secondary extent, China.

So for Bhutan, Bhutan probably doesn't have to worry as much about the changes in globalisation, but Bhutan needs to worry about translating a greater outward orientation into



more job creation. Bhutan also has the asset that it's a small country. Small countries tend to be far more agile than larger countries. So looking ahead now, and then I'll finish, and then we can perhaps have an exchange. We wrote down some thoughts, some preliminary thoughts, but we came in as outsiders, external experts. Our comparative asset is, I think, to offer global comparisons.

We had the opportunity to get to know Bhutan, but I think we need to have more of this exchange to make what I'm going to say, to make these suggestions, really firmer. But what we were thinking is the following. First of all, given the brain drain and the erosion of capabilities in both the public and the private sector, and given the fact that the reform agenda is so vast, we need to narrow it up, and that's actually a recommendation that applies to almost any other country, especially in the current context.

We need to re-strategise the strategy. We need to reduce the dimensionality of the vast agenda before us, into something more manageable, which means we need to formulate strategic big heads. That's very important because by focusing on fewer issues but the most critical issues, we can then also increase the chance of implementation.

Secondly, Bhutan's development strategy could be more demand-side oriented. In the end, we jokingly refer to this in the paper, to think more about what Bhutan can do for the world than what the world can do for Bhutan, paraphrasing John F. Kennedy here. But there is some truth to this.

When you think of tourism, Bhutan has of course a particular strategy that has benefited the country tremendously, but right now where we need to generate jobs, we need to boost economic growth, the low-hanging fruit is tourism. Can we rethink how we can scale up tourism while still respecting the environment and culture, and maybe thinking more about how to activate that demand, how to scale it up, so more demand-side oriented? And the third recommendation is, can we focus much more on the making-it-happen part, the political economy of reform, and the implementation? The political will is there, quite clearly.

So the challenge now is to have continuous implementation, consistent implementation, comprehensive implementation, and coordinated implementation. Maybe there are a few more Cs that I'm forgetting yet, but that's the challenge right now, and that's where I look at, I'm an economist, and I always say that 80% of the development challenge before us is not an economic problem, it's a governance challenge. And so that is what Bhutan now needs to focus on.

It needs to reduce, I think, the development strategy to a couple of big bets, and it will require a little bit more time perhaps to figure out what exactly needs to be done, and then really focus on bringing in the demand-side so we can scale up and generate more jobs, offer a brighter perspective for especially youth. Youth unemployment is, what was it last time I checked, youth unemployment is close to 30%, which is very high, similar, by the way, in China which has

skyrocketed. And then we need to focus much more on implementation. So that's it from my side, I'll be happy to respond to some questions. Thank you very much.

**Moderator Dasho Kinley Dorji:** I think your points really resonate very, very strongly with the vision of His Majesty the King that we hear here and the Prime Minister and Government's priorities on the focus on economic development. And also I think what we realise is that Bhutan should depend not just on wisdom, age-old wisdom, but really draw from the rest of the world. And here our government has declared it's very keen to work with UNDP. Hopefully, we'll see you here at some stage. And all these points which you brought up, I mean, this is very much being discussed here. So we'll make sure that this gets good reach.

So anyone have any other questions for Philip? Okay, there's one question coming.

**Member from the floor:** Hi Philip, I'm Deepika, I'm with Save the Children. But prior to working with Save the Children, I was working in the Ministry of Health as a health economic researcher. So in health economics, we usually do cost-effectiveness analysis. So I was wondering if there is any way to do a cost-effectiveness analysis. Although I know that the cost of mindfulness is going to be very high. But what we do in cost-effectiveness analysis is we usually compare costs against the benefits.

So in the process, what we get is all the areas of development that we need to look into. And then eventually we pass policy recommendations. So in this case, it will be some national recommendations. So I want to know if there is any way to do cost, not cost maybe, but benefit analysis for the mindfulness city. And come up with some national recommendations. Is that going to be an interest for UNDP and maybe Philip as well?

**Moderator Dasho Kinley Dorji:** Can we do two questions at a time? Okay, another question coming up. We'll do two at this time.

**Member from the floor:** I think it's a very well-written paper. I thank you, Philip, for that. I just wanted to also highlight that you mentioned how to chart out the path going forward. And in this, you also specifically mentioned the role that CSOs would play. What would be some of the areas that CSOs would be able to play? The very existential moment that you have described, is the role of CSOs. And it's also heartening to listen that an economist is talking more about the importance of governance more than the economy and the challenges that you are facing now.

**Moderator Dasho Kinley Dorji:** Thank you. Thank you. Okay, we'll go with Philip's response.

**Philip Schellekens:** Yeah, great. Thanks for these great questions. So on cost-benefit analysis, well, that's important, I think. It applies to the entire development strategy. So when we think about governance, the governance of the readjustments that need to happen, I think we need clear leadership roles to oversee implementation processes and also create accountability

mechanisms. So when we put the plan in place and we roll it out, we really need to have robust monitoring and evaluation mechanisms. And very importantly, we need to be ready to adjust. If it doesn't work, we need to change that. So I'm going to do the typical economist thing and tell you on the one hand and on the other hand.

So I'm putting on my economist hat and say on the one hand, of course, cost-benefit analysis is critical. And with regard to, as a side note, the mindfulness city, the special economic zone, look, it is important that a special economic zone is special, especially in the beginning when you set it up. The purpose of a special economic zone is to tackle cross-cutting development bottlenecks in the country that are otherwise difficult to tackle. That's how it always works. So if the special zone is not special enough, it won't work. So that is one observation.

But the second observation is that eventually, the special economic zone needs to become less special because we would like it to convey benefits to the rest of the country and for it to be a beacon towards development more broadly. So that is my thought, on the one hand, looking as an economist. On the other hand, I always say the best way to predict the future is to shape it or to invent it. So we can do our economic calculations and our cost-benefit analysis. But part of the big bet is also that it's a bet. And some investments do not have an immediate return. So this is where the vision of His Majesty the King comes in, or the Prime Minister, the 13-year plan. There are so many countries around Asia, and Asia has done so well in terms of visioning.

So think of Singapore, think of Korea. What sets these countries apart from others, I think, is the ability to anticipate, the ability to adapt, and the ability to act upon that continuously, consistently, comprehensively, and in a coordinated fashion. So let's look at it narrowly from an economic point of view, and do the cost-benefit analysis. We have to do it. We don't want to waste millions or billions of resources, obviously. But let's not forget the vision. It is a bet. We are putting our hearts and minds together to pursue a new vision in these markets. And this is where the leadership comes in. Leadership is so important in this.

All the CSOs and also the NGOs are absolutely critical. When I was in Bhutan, the meetings that I enjoyed the most were with the CSOs, and also with the private sector. Getting the underground perspectives is very important. But it's important from another dimension. If you are going to develop a new vision for the country, to re-strategise the strategy, to develop a big bet, you would like to foster an inclusive process, where everyone is a consultant, so that afterward everyone can get behind it. If we formulate grand strategies for development in an exclusionary way, there will be more likely implementation bottlenecks down the road.

And what Bhutan really needs right now, I think, is confidence, to project confidence to the youth, not to leave the country necessarily, because perhaps that shouldn't be the recommendation. Perhaps the best way is like friendship, you know. It's like you open your hand and you grab some sand. If you grab the sand, it will go away, but if you keep your hand open, it stays. The same with brain drain and migration. Brain drain and migration are like a container ship.

It's very hard to turn that. It will take a long time to fix that. There are no quick fixes to it. The best approach might be to embrace it, and then to try and develop connections with the diaspora overseas, and gradually start to offer greater opportunities within the country, so that eventually Bhutan can benefit from the growing connections with the overseas population. But eventually, that container ship will change. But for that, we need a grand vision, and we need to have inclusion.

And I would argue inclusion also of the diaspora. The diaspora can be a source of innovation and a source of inspiration for what needs to change in the country. Thank you.

**Moderator Dasho Kinley Dorji:** Thank you very much for this kind of wisdom. Let's go for one very quick question with a quick response.

**Comment from the floor:** My name is Thinley. I just have three points. You've answered some of it already, but nonetheless, I'll just state it in case you have more to add. So in terms of the plan and the re-strategisation of the strategy, I think it all makes sense. But in terms of translating that to implementation, I would imagine some are short-term, some are transitional, and some are long-term, especially when you're looking at reskilling and job creation. That's a long-term game.

So if you have thoughts around the short-term, the medium, the long-term, and what is the transitional phase that is required. The second one, closely related to that, is any plan you need to have resources to make the plans come to fruition. So I don't know if you have any thoughts around resources, and especially looking at innovative financing, how that can come into play when you look at impact investment, outside investors coming in. If you have given some thoughts around that in your discussion with the government, and closely related to that is the policy framework and the immediate environment for that. And the last one, I would say, is the timing. Because you have these plans, but if you don't act on time and you make those implementations, you can draw up grand plans that wouldn't necessarily come to fruition. So if you had discussions and thoughts about the timing of such resources and the duration of the strategy implementation.

**Philip Schellekens:** So the last one is the easiest. The timing is yesterday, right? So there's great urgency, but that's where the danger lies. We always act as if we need to act as soon as we can. I always say, slow and steady wins the race. You have very ambitious targets laid out. And I think targets just like the SDGs, need to be ambitious. Because they want to project aspiration. But of course, you know, by putting the bar very high, the chance of not meeting them becomes higher and can create unhappiness. I always joke Bhutan is big on happiness, right? And I know that Dasho Kinley worked on gross-national happiness. But for me, happiness is an equation. It's equal to reality divided by expectation. If the expectations are high, it's harder to meet them. But leaving that aside, what is more important, I think, is the direction of travel. And being overly

focused on the destination. It is important that we put in motion a comprehensive set of policies to then tackle those big bets that we need to develop.

We need to work with the government. Actually, the ownership is, of course, completely with the government and we as external advisers can provide inputs. But the government will need to, for it to be effective and for its restrategising of the strategy to be effective, really narrow it down into a few things that are really highly impactful and could be delivered.

And the timeline will matter here because there are low-hanging fruit actions that require no money. Look, let me give you one example, we always talk about money, right? As a constraint. There are reforms that you can introduce with the stroke of a pen.

In Laos, for example, the UNDP helped the government prepare a tax on tobacco, health taxes. Not all of you might like that. But with the stroke of a pen, such an introduction of such a regulation can affect the lives of millions of people. There are low-hanging fruits, stuff we can implement right away which will have a near-term effect. Other things like changing the education system, changing an innovation ecosystem, and diversification in Bhutan have been talked about for decades. These are slow-moving processes. Changing an education system may take a decade. Changing an innovation ecosystem may take a decade. But the point is, you have to start with that right away.

So this is where the governance comes in to ensure policy continuity so that the start of the reform agenda is not disrupted by the next political cycle. That's an important thing. I would also talk about resources and innovative financing. Look, in the end, I always believe that good ideas have no trouble finding resources. Oftentimes, we think that the problem is the lack of resources... It is not a lack of resources.

The problem is when you see that there is insufficient investment, there are two ways you could look at it. You could say, well, the private sector, the private financial sector, doesn't want to provide the resources because the risk-adjusted returns are perceived to be too low. That's one way to look at it. But another way to look at it is the policy environment is such that there isn't enough space for the private sector to produce and demonstrate the profitability of a high-impact project. It is always a mixture of these two considerations. Is it the chicken or the egg? Is it the lack of finance or the lack of a profitable investment opportunity? I would also focus on that.

On innovative finance more generally, it is always fashionable to focus on appealing instruments such as the Debt for Development Swaps, and Debt for Nature Swaps. These instruments can be helpful in mobilising finance and killing two birds with one stone or reducing the debt burden and improving some social or environmental objectives. But they are not always the right instruments. Let's take a big picture and look at the entire spectrum of solutions before

necessarily going to the non-deficit instruments. That is one of the things I wanted to say. I don't know if I answered all your questions here.

**Moderator Dasho Kinley Dorji:** Yes. Thank you very much. Thank you for these good ideas. You have also given us the terminology to express them and I think also the headlines and the deadlines to bring attention to them. Thank you very much. Most of all, what I liked was you have convinced us that happiness is no laughing matter.

**Moderator Dasho Kinnley Dorji:** We will move on. Were there one or two pending questions earlier?

**Audience member:** Thank you. I have been with UNDP for almost 20 years and now I am retired. Thank you to all the presenters and especially Masaki-san. Thank you for the story. I really appreciated the way you connected the story about this milk processing project in Shinkhar village, a small village in Ura in Bhutan. I was also fortunate to be associated with the Shinkhar community back in 1996-1997 as part of FAO's nutrition project. How you connected Shingkar's experience with the mindfulness city and also concluded with this message that the mindfulness or the growth of the city, the city's economy actually should go together with the growth of the communities around; I think that's really an important message, and the story, whether it was Shinkhar village or Mindfulness City, what I really would like to emphasise here and highlight is that I think it's very important, the approach. I think that's what is important, how you approach, the approach you take to shape the economy, the governance, and the society. I think that's the theme of the conversation today.

**Audience Member:** So thanks to Masaki for pointing out the importance of community. This is an economy that also has to be listened to today. GDP and capitalism are the default mode, nothing wrong with it, but how do we bring GNH back in? There's a community project that extracts water in Gasa, I'm not sure if it still works, but there's also another one where there's an investor and some investors from Switzerland, they put in money for a local community to plant and grow flowers, and a certain percentage of earnings from the project goes back to the community; they can decide in the community how to use the profit for that year. A certain percentage of it has to be ploughed back to the management and the rest is up to the community.

And I think we do have some examples. You mentioned co-ops, we see increasingly private investment into community water resources popping up, so I'm just wondering whether we have policies to streamline that and to think about it from a community perspective. And then it's not just about community in rural areas, GNH talks about community in urban towns, and in one of these articles Jonathan Rose, he's on the International Advisory Group for Urban Planning, he points out the lack of focus on community, green parks, etc., and our oversight in the past, in our haste to develop, not to put in enough effort into the implementation. So thank you for that reminder (of community), I think it's important that we think of it and really look at new ways, CSI

is there, and we have entrepreneurs that they would like to share, it's very important to think of co-ops and other possibilities and not just large investors from outside making it "business as usual" and businesses.

**Moderator Dasho Kinley Dorji:** Thank you. Okay, we will go to education. I guess it's better to share because the thread is the same. I also wanted to thank Mr. Masaki for really bringing back the community. I feel like in this era of transformation for Bhutan, we've been looking outward to our indigenous knowledge and practices, so I think we also need to come back because GNH is in Bhutan and we have to focus a lot on our indigenous knowledge and practices and experiences to really take us forward. So, Mr. Masaki, you are highly appreciated. Anyway, after this, I will go to the Education session, and after that, we will come back to the discussion. So let's hear from Tshering on education, the Bhutan Bacculaureate. Okay, Tshering, give us some of your thoughts.

**Tshering Nidup:** Thank you, and I think in a way the discussion that was on the economy, on communities, all these things that in a way come down into education but I think just listening to the conversation this morning, what was fascinating in a way was how Bhutan is positioned to be able to offer so much and just this morning driving from Paro to Thimphu in the morning, I was listening to a podcast on how NVIDIA as a company grew up and how it became a \$2 trillion company in the last two years and what was quite fascinating and the analogy that I could draw from there was in a world where everybody is thinking is all there. Everybody has thought about what to do and what is good for their country and what is good for their community and likewise Bhutan has thought a lot about it but I think the opportunity for Bhutan to be NVIDIA in the world is huge because the interesting thing from that podcast was that in a world where all the tech companies were trying to mine some things, NVIDIA came up with the shovel. They came up with the chip that was able to do the computing and I think in a world where everybody is now thinking about how do you bring in community into education? How do you bring holistic learning into education? Bhutan could provide the shovel, the model, and the how of it with the Bhutan Bacculaureate as a system of education from Bhutan.

It seemed very clear from the beginning that His Majesty wanted an education system from Bhutan and what do I mean by "from Bhutan"? From Bhutan is what we've been talking about this morning in terms of Gross National Happiness, environment conservation, how Bhutan does it and how Bhutan focuses on the holistic well-being and happiness of the people over GDP, and what Masaki-san also highlighted this morning was the thread that brings Bhutanese together is the community, the sense of community that we grew up with and just to take you back, we don't need, I think, thinking forward from our end. I think His Majesty is visionary enough to look back from the time he became the King to his National Day address last year. If you just read through it and distill what he meant about Bhutan, I think the vision is all there.

I just wanted to take you back to 2011 when His Majesty was talking to graduates at Keio University in Japan, and we're talking about 2011, the time frame becomes very important

because in that he talks about how technology is driving progress and 2011 is well before anyone started talking about chat GPT and AI and the emerging technologies and in that he says while technology is driving us forward, the human relationships have become very, very fragile now. The human connection, the human relationships have become fragile, societies have become fragile and the fact that we may have become a global village in terms of the technology reach and the ability to connect but we've become isolated islands in those global villages and the important thing that we draw from there was he says that the answers or solutions to these problems won't come from technology or science, it will come from values that are inside the people who are there and that's where his whole vision of the Bhutan Baccalaureate comes in. I've just explained to you why we called it Bhutan and then the Baccalaureate originated from Bhutan but more importantly when we look back into the word Baccalaureate itself, now since the mid-18th century Baccalaureate has become synonymous with educational qualifications, educational degrees but if you go back to the Greek societies from which the word Baccalaureate itself originated from, the word Baccalaureus comes to your head and how do you earn those laurels? You earn those laurels by doing great service to your community. And I think by Bhutan Baccalaureate we mean people who grew up with all the understandings of the world that you possibly can develop but with the mindset of a Dasho without a title attached to it. We want people to be able to think like that and that I think is where a lot of the things that we can offer come from, at the center of it there is curriculum and all that but we focus on a process of learning, what we call as a learning process and at the center of this learning process is Guru Padmasambhava, the patron saint of Bhutan and his approach and his way of life and two things that we've taken from his way of life – Buddhism and all these were a big part of the Bhutanese way of life.

He could have criticised everything that was happening and said I will offer you an alternative approach. He did not do that. He offered things to be added recognising the fact that there was already something that the society was doing, so he offered things to be added on, and over time what got offered as add-ons became mainstream Buddhism in the country. But if you look at the nuances in every region you go to, the philosophy of Buddhism might be the same but practices are very different and that I think is something that many educationists and everybody have talked about in terms of education needs to be contextualised, education needs to be looked at from a perspective of what role do they play.

So we keep talking about education that has to be student-centered, a learner centre but it is still driven by adults and in that, we try to flip that around and bring in the concept of how the individual takes ownership of that. Individualisation, contextualisation, as much as we say technology can individualise but there is no point in having a teacher attached to one student... the world over it has never worked. So the motivation comes from within an individual in terms of what you want to learn, how you want to learn it, and what you want to be assessed on. I think those are the major areas that we are focusing on.



For the next five years, 10 years, we'll always be dependent on the thinking that everybody does outside. Because unless the town develops into an economy that produces thinkers and into a place where, and we're hoping that the Mindfulness City might be able to do that for us, the frontiers will always be driven by what happens outside the town. And we have to accept that fact.

But how do you take that from outside and wrap it around what is Bhutanese so that children grow up not just with an understanding of what happens outside, but also grow up with a very strong understanding of what happens within Bhutan? And I think that combination is what we are trying to achieve. At the end of it, the major work we are focusing, concentrating on is assessment and reporting.

And in terms of how do you move away from just defining a child's growth over the last 14 years by just a sheet of paper, which says 18 in mathematics and 79 in physics? How do you present or paint a picture of the child and their learning journey over that year so that anybody who looks at it is able to see what the child has gone through and how they have come to this journey rather than what the journey is ending in that part? And I think fortunately for us, after the pandemic, this reform is now driven not by the school education, this is driven by higher education institutions where they are now looking at the end of the grade 12 examinations and saying, what we're getting from there is not good enough.

We need something that's more representative of what the child is bringing. So if you look around the world, there are things like the Mastery Transcript Consortium that the US has formed, the Big Picture Learning Credential that Australia is doing, the Learner Passport that Switzerland IB schools are doing, where they're now trying to capture the learning journey of the student, not necessarily the marks that they are getting. And you've seen that in Bhutan itself. Every university, every college under the Royal University of Bhutan has put up their own entrance systems. I mean, it's great, but it's not great for the students who are going through it. You've just finished an examination at the end of grade 12. Now, two months later, you have to sit for another exam, another interview. So how you streamline these processes is where we are looking at in terms of what we're coming up with, what we call the portrait and learning journey of the child. Fortunately, I think that has gained a lot more traction. In about two weeks, we have university admission officers from some of the major universities across the world coming to campus to look at what we are offering as a portrait and then see, if would they like to take it as a way of admitting students into some of the Ivy League colleges across the world. So that's the whole journey that we've been on. Thank you.

**Moderator Dasho Kinley Dorji:** Thank you very much. I think we seem to be in good hands. And important points, the human versus technology. I think we had someone here once many years ago, a thinker who said that we tend to forget the human when we think of technology. And if we let technology decide what we're going to do, we're going to do the wrong things more efficiently. And then also, as someone who sometimes wears a *Patang*, I have to also point out

that, yes, the laurels which you're talking about have to be worn on the head. Sometimes we tend to sit on the laurels, which means wearing it on the wrong end. Okay, I'm sure there are many comments on education. So the floor's open, and then we'll come to the general comments after that. And I encourage all of you, we have people from different sections of society here, so if you want to share your thoughts on how transformation is affecting you, or what you'd like to see with transformation, please share with us.

**Audience member:** Hello, greetings, everybody. I'm a student, I'm studying in the United States. I used to be a student at RTC, I've been taught at RTC, I'm a big fan. I still follow my roots over there. As we talk about transformation, the thing that I want to really streamline right now is the transformation of culture. I come from a commerce background. I studied commerce in my high school. I did IT in the ninth and 10th grade and now I'm studying liberal arts. I got a lot of comments about what I'm doing in life. They said, why didn't you take science, you're a smart kid. Is it necessary? And even when she (indicating the previous speaker) mentioned STEM, they tried to take it out from arts and commerce.

So is it really necessary that we really point out that STEM needs to be different, and commerce and arts need to be different? Because I still remember there was a commerce teacher who demotivated me in life. He said that commerce students don't have any future. Only science students are supposed to be the brighter ones who are going to rule the country, who are going to be the faces of the country and do everything. So when we talk about transformation, it's not only about, you know, development coming in. It's not only about earning good, employment being generated, or people doing good in life, or the country doing good in life, but, you know, Abdul Kalam still mentioned that the great minds of the country lie in the children and the youth of the country. And how are the adults, like some mentioned how are they imposing the thought that only science students can do good in life? So is there anything that we can do about that? I would be really glad if anybody would pass a comment or maybe talk about it. Thank you.

**Moderator Dasho Kinley Dorji:** Thank you. You're bringing up some important comments. One of the discussions that may be coming up now is also with the focus on STEM, which we all agree with. Don't neglect the arts, creativity, the humanities, you know, the balance is needed. So coming from a young person, again, it's very encouraging.

**Member from the floor (President of a local College):** Okay. So, comments coming from a young person. So, there's no one who wants to neutralise that. I was just attending a symposium in Paro, Paro College of Education that was titled, Reimagining Education from the Perspective of DNA. Fantastic.

And in that, one of the conversations that we had was that even in terms of happiness, meditation, and everything, there are explanations from neuroscience, how, what happens to the brain. So, in a way, there's so much input from neuroscience.

And then in terms of transformation, where should it begin? Should it begin at the higher education? Should it begin at the primary, when the brain, when they have less to unlearn? And what, in terms of efficiency, where should the transformation, and where should all these changes begin? At the primary, at the higher (level)? So, in a way, with reference to neuroscience, I think we can be much more efficient. There will be less effort, and less energy wasted, because you exactly know how, even learning, neuroscience now has so many implications.

How can learning be made much more efficient? So, it's very impressive that you are in this business of impacting children, behaviour change, and habitual change. So, I'm thinking in this area as well, just a question and a thought. Thank you.

**Moderato Dasho Kinley Dorji:** Thank you, very encouraging from a senior teacher.

**An audience member from an International Development Agency:** Very encouraging to hear from Mr. Tshering Nidup. I mean, the real definition of baccalaureate, and what I previously understood of Bhutan Baccalaureate are different and it's very encouraging. But at the same time, I, being a father, my son is in class 11. He's a science student, but now, what has Bhutan Baccalaureate got to do with the new curriculum in Dzongkha, especially at a time when you are giving so much focus on STEM, and then we are also, accordingly putting so much focus on the student, and then comes this, Dzongkha, Choe-kay, being put in place, he's finding it very difficult to balance having to put more focus on STEM subjects, as well as now with this new, Dzongkha, Choe-kay kind of subject. I don't know whether this question is relevant or not, but that's one. The other one is, you basically mentioned, scoring high marks, and then getting good marks, is not only the way you assess students, which is very encouraging but if you look at the past two, three years of, how you enroll students in DGI, I mean, the first requirement is 95%, right? 90%. And that is the whole criteria that you try to put on people, and the students to DGI... So, maybe, how do you, going forward, define or maybe re-think or re-strategise the criteria of enrollment that you already have in place? So, thank you.

**Moderator Dasho Kinley Dorji:** We'll give you some time to digest all the questions. We have some questions here, also. Yes, please.

**Member from the floor:** Can you please also just elaborate or explain what you mean when we contextualise the curriculum with being Bhutanese? What are the specific things we are actually learning? And also, at the same time, what has been taught or done at the Royal Academy? In normal schools, in our Bhutanese schools, the first and the most challenging thing that teachers share is the number of students they have in the class, and the shortage of teachers in the schools, which really is challenging for them to actually implement what you have taught them or trained them. Thank you.

**Moderator Dasho Kinley Dorji:** Please remember, there's an article here also called Bhutan Baccalaureate in this issue of the journal.

**Member of the audience, UNDP Resident Rep. Mohammad:** Now, just a small comment, I was listening with interest to all the discussions. In education, it's debated in various parts of the world. The West is not happy because they say the Asian kids are really good at math. Asia is not happy because they say the Western kids are maybe not applying to education when they are the ones coming with the billions in startups and all of that. So, it's a healthy debate. I'm sure in Bhutan, I really enjoyed this debating conversation.

I completed my year and a half here, so I don't have kids going to school, so my own interaction with education here was with the law school, the Royal Academy, and in a few others... the digital college, I was quite impressed with that. But proof is in the pudding, right? So, I have dealt with young Bhutanese interns. So, since I came, some of them are here, right? So, I told the office, we have to bring these interns and give them some exposure.

I can tell you that I have really come across such bright talent, I have met more than 10 of them. We recently got two interns and they're working with the team there on this concept of sustainable funding for the highlands. And when they came to the office, they presented that.

I'm not exaggerating. I would have spent quite a bit of money to bring consultants from outside to develop a concept like that. So, it is, a lot of Bhutanese, go out, the language barrier is not there. All of them speak English. They have a very good reputation. When they go out, they get jobs, they work within UNDP. I am struggling because UNDP is taking them away from our office. They couldn't get an economist in Indonesia with, you know, that much population. So, they poached from us, and this is the product of the education system. So, the question is, education will always need improvement. I say this debate will never end. It's a healthy debate. We should have it. But the question is, is it really education, or what happens after education that is a challenge? You know, these bright, young Bhutanese that I've seen, their challenge will be how to use the talent they have gained and how that can be utilised. So, be critical of your education system and be proud of it as well. Thank you.

**Moderator Dasho Kinley Dorji:** Thank you very much, Mohammad. With all this, you know, the youth emerging as the experts, I don't know whether to get a little worried about being irrelevant or very confident and leaving things to the next generation.

**Dasho Dechen Wangmo (The PEMA):** I have a few comments. I will do the latter one when you have the general discussion. But specific to education, I think first and foremost, congratulations on the Bhutan Baccalaureate. I think within a very short period of time, you have managed to get recognition from UNESCO as well, which is incredible. And this in itself shows that what we need, what Bhutan needs is a common vision. And if we can have a common vision and then back that common vision with a sense of solidarity, then I think we can achieve incredible things.

And incredible things can happen to Bhutan. And I want to highlight what Dasho in the morning said, that transformation is His Majesty's vision. And now that we have a vision, I think it's our duty to figure out how do we translate and find the hows of this vision. Just last evening, I was reading the journal in preparation for this conversation. And towards the evening, I was reading with my son. And I picked up his social study textbook, a class six social study textbook. And it talks about gender.

And the textbook says, girls are gentle, and boys are rough. In the textbook, it says, women give birth to children, but men do not. Girls sweep the houses. Women can breastfeed babies, while men cannot. And boys don't cry. So we have the Bhutan Baccalaureate, which has an incredible objective of learning. If you go to Pangbisa and listen to any student, randomly pick a student, probably because of the prerequisites, they are incredible, they are smart and admirable. And probably they are the ones who are applying to the UN. Just joking.

But then, how do we now take that and translate it to this? 96% of our students are learning this. So this is the class six social study textbook. This is reality. No? So now I think these forums are very important forums. Because I think this is where we have a great opportunity to figure out the mechanics of how we translate that vision into the reality that we are facing.

And I think this is where we see a huge gap. Namgyal, I love that idea of not ignoring the humanities and the social sciences and just focusing on STEM. But how do we integrate that? How can the Fab Lab under DHI become part of CST College? Or, I know there is a JICA-supported CST or there is a Fab Lab there. But can that Fab Lab be turned into a certain Primary School's lab? So this is how do we break this silo? Unless we have a transformation in breaking that silo, I think we will be very happy and proud in our own world. But we're not able to collaborate. Philip from UNDP was saying, that all these C's, which we had in the 12th five-year plan - coordination, collaboration, consolidation.

Consolidation. You know, by the 12th five year plan was finished, the 13th started, and we are still struggling to go through. And this I realised in my five years in governance. It's a lot to do with myself. How do we break this silo approach? How do we feel that, oh, I can go any time to Druk Journal or BCMD and feel at home? I can go to UNDP and feel at home. When it's like, oh, that's UNDP, that is me, that is you, that is I. So how do we break that silo? I want to echo, Sir Tandin, who was also my principal when I was in YHSS. I want to echo, you know, starting young. I mean, where do we start this education? Should we wait till high school or primary school, or should we really go down to ECCD and start? We have a plan to do all this also. I've seen Bhutan over the years, and we really feel it's something that, if we may be very candid about it, today we have a lost generation.

And His Majesty says that I don't see the spark in my children's eyes when I visit them, you know? So how do we change that? How do we bring that truth in their eyes to see that I want to

do something for Bhutan? I want to make Bhutan proud. How do we do that? So we need the mechanics of how to do this, how to translate that vision into reality.

**Moderator Dasho Kinley Dorji:** Thank you, Dasho Dechen. Yes, please.

**Member from the floor:** I'll take the conversation to technology and digitisation now. Sorry for that. I think there is no escaping that technology is one of the key drivers for development of Bhutan. And digitisation, you know, there's no excuse. Because when NDI was initiated, we had no voice but just to go and give a thumbprint and index thumb and whatever, all prints we gave because there was no choice. If you don't do that, you don't get to pay your tax. You don't get to renew your passport.

So there was no choice. But for people like me who have questions about data security, right? You just have to go and give. And I think yesterday somebody decided that my face would make a good character for his story, a fictional story. So he used my face and created a story about me. And that's the greatest irony because all this while I've been talking to young people about online safety. But the thing is, my account is private. So I wonder how this person got my photo. But data security, I think many of us acknowledge that it is important. But we still continue to use pirated software.

Look at all government websites, including private and civil society. All websites, you know, it's not secure. But we choose to, I don't know, be ignorant about it. So are we fooling ourselves? That's the biggest question I have, thank you. Okay, now we'll finish education.

**Moderator Dasho Kinley Dorji:** One more on education. And then we'll open up. By the way, the questions are not only for the people seated. It's out to everyone.

**Audience member:** Thank you for doing this. I think it was very encouraging to hear about the Bhutan Baccalaureate and how it's going well. And what we also know is that it's being piloted in 22 government schools now. This is very encouraging. I just want to narrate this story. It just happened yesterday with my son. He's in grade six. And after his tuition, he happened to make some purchases. I think he got an ice cream and chips. And he came back very happy. And he told me, "Mom, today I negotiated with the auntie when I made the purchase." It cost him Nu. 55. He managed to get it at Nu. 45.

And at that moment, he said he felt like he could do anything. That he could become a president. So that is what he said. And I was very proud. And he doesn't go to a baccalaureate school. He goes to Druk School. But why I'm saying it is we want to raise children who have the confidence to be able to do things. At any point in time, not every Bhutanese child can become the prime minister or president. And what you mentioned is about also trying to be the best version of what one has known up here.

And if the Bhutan Baccalaureate works, it's 22 schools. There are many, like over 400 plus schools which are not part of that level. As parents, and particularly to voice out those parents who do not know about these systems, I would like to just represent them and say, are the other children losing out? Is it fair to those children who are not part of this? What can be done to expedite and bring them into the mainstream if the Baccalaureate can actually work? And one thing is, as parents, we also have here stories from our children where teachers come about and tell children, oh, you are useless.

So this is something that I take it personally and I'm very happy to be part of BCMD where we have these programmes with children where we can actually give them that confidence. Not that, oh, you are very good in science or English or Dzongkha, but you are a student, you have potential, you can go and express yourself to be able to bring out their voice. So at BCMD, I'm happy to share with the gathering here that through the media and democracy clubs, what we are also doing is we have started working, bringing children from the primary school levels into our fold as well.

And there, we are not telling them about, okay, you have your democratic rights, but we are trying to give them that voice to go and be able to stand in front of a class or let's say in front of a room full of strangers to be able to express themselves and say, oh, hi, I'm Tandi Norbu. I come from this village. My parents are farmers. So that's the kind of thing that we are doing and I feel very proud to be part of this organisation. And what is happening around, I think it is very encouraging and I would like to request that if there could be ideas that we could actually collaborate on because the Bhutan Baccalaureate works in Pangbisa and in 22 schools, but there are many others and let's try to be wholly inclusive that way.

**Moderator Dasho Kinley Dorji:** Thank you. Thank you very much. I hope we're not in a great hurry to go back to our original topic, but you can see that the presence is really inspiring debate. Lots of good questions. Absolutely. Now, there are many hands up.

**Tshering Nidup:** I think the whole aspect of discussion, and for us, the whole point of education, education itself comes from the word educare, which is to bring out the best that is there within an individual. And I think that can only be done with everybody coming together. So, unfortunately, education has now also become only what happens in the school. But I think all of us, most of us in the room, are parents who understand the role that parents play, the role that community plays.

And I think I'm very happy to hear this, and I know about what BCMD does with the students and young people to also become a part of their growing up journey. But just beginning with a few questions that I think are important for us to address. The first question is, why don't many people get to hear about what happens in Pangbisa? So if you now start looking at it, since 2022, we've started sharing a lot more. The reason for that also is from 2014 to 2021, His Majesty's command to us has been to try out, to put into place an education system and see,

and that he needs to see evidence that it works. Because coming from the earlier experiences of the Royal Education Council, started with creators of intentions, not necessarily functioning the way that has been envisioned. So for the Royal Academy, from 2014 to 2021 also, we were in the trial phase under His Majesty's supervision and vision.

Now, if you look at our website, you will see a lot of the stuff that we are doing at the Royal Academy, within our research center, and all the documents on the Bhutan Baccalaureate. Again, now, because those have all been IP'd (intellectual property) under His Majesty's name earlier, we were also told that, be careful of putting everything on your website, because we've heard stories of schools and institutions outside taking all these ideas, and these are our ideas. So now all have been IP'd under His Majesty's name. So we are more open to sharing, and we share a lot about what happens in the 22 schools as well.

Coming back to the Royal Academy, well, again, very low-key in the media. So the only advertisement or announcement that we make on the website is the slots that we offer for 40 students to come to the winter camp. And for the winter camp, we invite 160 students. Out of that, 40 is what we advertise. And those are only for people whose kids are with them in Thimphu or Punakha, but their census might be in some other part of the country. Civil servants, anyone who's moved here, we felt it was only fair for them to open up a space for their children to come into the Royal Academy. And the only criteria that we use to shortlist these students is academic merit. So we use the academic merit grade 6 results to choose students. We have another 126 students each from all the 20 districts across the country. And four of those come from the Kidu background. So your criteria to get into those four is that you are a single parent often, or your family is undergoing a lot of challenges.

And you just have to have passed grade six. And then we also opened up two slots for the toppers from the Dzongkhags. So six coming from there, 120, we add up 40 there. And once everybody comes there, then we look at, we eliminate the academic scores from there, and look at the five-year group development extension. Initially, we also thought, oh, maybe all the toppers, the two from the Dzongkhags that come, the toppers might make it to the Royal Academy quite easily. We're very happy that this has not been the case. A lot of the kids who come from kidu backgrounds, at least 60% of the Royal Academy every year is made up of kids who come from the kidu background. And that, you could actually go back and look at the Royal Academy students' grade 12 results over the last three years. Many people might say, we have not performed as much as people would have expected. Because everybody thinks, all these toppers that come in grade 7, now in grade 12, they've got 70%-75% because most of these kids who joined us, they've moved a lot, they've grown a lot, but still, if you look at it from the performance against others, they haven't done too well yet.

But we're happy that UNDP and other organisations are starting to see what they are capable of, and what their potential actually is. Unfortunately, that's not the case in terms of college admissions and also the world of work as well. But I think, again, to make things a little easier



for schools and higher education institutions in Bhutan, from this year, Gyalsung is coming in. But I think our concerted effort now, from both ends, from the high school end and from the higher education and the world of work, has to be looking at, from the high school end, trying to feed into, how do you prepare the kids well so that they get into Gyalsung and be able to use Gyalsung? Because Gyalsung is now going to give them that springboard of the platform to actually choose where they want to go. And for the colleges and the higher education in the world of work, it's about how we can leverage what kind of graduates come out of Gyalsung into the systems that we are looking at.

And I think that's an area we haven't done enough work on as an education system. I think that's an opportunity that we need to tap into. In terms of what actually happens when we talk about community and when we look at the role of community within this, is the first bit of community that happens when the student comes into a Bhutan micro-league school, not necessarily the academy, any of the 22 other schools, our teachers spend a lot of time trying to understand what the students actually know. And unfortunately, a lot of our assessment methods the world over is designed to look at what you don't know. It's not necessarily looking at what you know. So once you look at designing forms or designing options, then those do not always have to be questions or paper and pencil kind of tests. It can be interactions, it can be activities, and through those you try to understand what they already know, and try and build up from there. So that's the first bit of community that the challenge brings in.

And then, we can talk a lot about it, and what will be interesting for you to look at is what we call the connection of seven gifts. Every student, in all the Bhutan Baccalaureate schools, from their community, once a year, brings what we call the seven gifts. So these seven gifts are, you know, patterns from their community, food recipes, songs, dances, indigenous games. So once you put a collection of these together, these become part of your learning resources and your textbooks.

So somebody learns about a game that you never heard of from a different part of the country. And if you have students from outside the country, they will bring their own gifts from their community. And that's our way of looking at how community plays a major part in that. Again, looking at the role of parents, we can talk about all these for quite a substantial amount of time. But I think what was quite fascinating to hear from a young friend here is his own journey. And I think, when I look at UNDP, these two are very closely correlated. And I've seen a lot of these kids growing up, not sure what they're supposed to do, but also how our systems are designed in a way that they start segregating you, right? And that's a part of the assessment.

Assessment at the school level, assessment at the district level, and you have all these schools that set their own benchmarks. If you get a 70% in grade 10, then only you think about science. Otherwise, don't even come to us for science. Or the other way around as well. And I think the world has not always worked that way. For you to understand what you really want, I think the one kind of exposure, the experiences that you go through contributes to finding out what you really want to do.

And I think for a lot of these students that have been at UNDP, I hope that's also helped them understand, maybe I thought I wanted to go to computer science, but actually humanities is where my interest lies and I want to go there. How do you create space for all these? I'm a firm believer that science and technology should not be just for science students. We are trying to open up, again, even at the Royal Academy and in the Bhutan Baccalaureate schools right now, there are certain limitations that are posed by examination nuance.

When you have to sit for that, the choices become slightly limited. Ideally, we would want to open up spaces where a child is able to decide, I want to do physics, mathematics and economics. These are the three combinations. Then somebody might say, actually I want to do history, mathematics, physics, and chemistry. So all these combinations, and I think the ministry is also doing a lot of work on that area, trying to diversify the grade level control area in the last two, or three years. I think there's a lot of work that has gone into that. But more importantly, I think the whole aspect of internships and understanding and exploring the world of work is not part of our education system in that sense. If a child was able to get an experience at UNDP or BCMD when they were in grade nine, how would that change their perspective about what is it that they want to do when they reach grade 11? How would that affect their subject choices? So one of the things we've done with some of our Baccalaureate schools, again, those are not for all the schools, we tried it out with Royal Academy and then some other Baccalaureate schools, is when they come to grade 11, we give children the choice.

What is it that you want to do? Because they have to go and sit for a BCSEA exam, the choices are still fairly limited, but at least opening that up in terms of somebody who might say, you know, I want to do science. And then his teachers or our teachers come down and say, actually, based on all these experiences that we've had with you for the last three, four years, we don't think that's a great idea. Why don't we look at something that's in this area? So it's a conversation. It's not something that puts the child away. It comes from an understanding that the teachers have.

And for children, that is necessary. Sometimes when you open up choices, everybody wants to become an astronaut. But we know there will be three or four of them who will struggle and may not be able to make it within that specific amount of time. I've been looking at countries like Japan and Singapore and a few other countries that moved at least 30 to 40 years ahead of us in terms of science and technology. What are they struggling with just now? They're now, society's complaining about not having enough philosophers, thinkers, and artists. And where does that probably come from? Because their entire focus has been on the understanding, you pushed them really forward, that you left your humanities and your art and your physical education behind, that you're now struggling to find thinkers and philosophers. And I think for Bhutan, the NDI's part also gives us that advantage in terms of, let us bring all these together, let's focus on all of these. As the children go into higher grades, I completely agree that they

have to start focusing on certain things. They can't be doing everything at the same time. It's humanely impossible, even with technology around us.

But I think growing up, they must be exposed to as much of an in-depth environment as possible, which brings me to the question that was raised on the neuroscience aspects, providing us a lot of input. And if there is something that I have picked up from my own readings and whatever I watch about the recent developments in neuroscience, it is the fact that you can learn, and the whole aspect of neuroplasticity in terms of your neurons are able to create more neural networks even at the age of 95 or 100 as much as what you would be able to do at the age of 2. What was quite fascinating for me when I was looking at some of the articles was that there were these x-rays of the human brain and what it showed was the synaptic formations of the human brain over time. And by age two and by age 30, comparing age two and age 30, the human brain, the synapses that are formed in your human brain is almost similar in terms of the density and the population.

So what is quite important from the way we are looking at it is how you create, irrespective of what age you are dealing with, enabling environments. The most important aspect, I think, is the enabling environment that you are trying to create. Whether you are dealing with adults, whether you are dealing with a two-year-old child, or whether you are dealing with a 15-year-old child, how do you create an enabling environment where they feel that there is the support, then there are boundaries, certain boundaries have to be established, in which they are able to try and grow. The most important aspect of that, I think, is that we live by choices and consequences.

All of us make choices, and there are consequences. Some consequences are good, and some are bad. We always live by that. How do you help them experience that? Unfortunately, a lot of the consequences in the child growing up is taken away by the teachers, the parents, or adults around them. You don't get them to face the consequences of their actions. How do you allow them to face these consequences?

**Moderator Dasho Kinley Dorji:** Thank you very much. That's a very profound question to end on. Thank you very much. I think it's reassuring that our younger generation will get this broader exposure from most of us who, when we finished, when we are looking for jobs, we had to either think of being a doctor, an engineer or become an atsara (humour).

So thank you very much. I think the idea here is not to try and solve all problems, the idea is to raise questions. Thank you.