plenary session



Welcome Address By Shri Arun Patil, Chairman, IDA (WZ)

t is a very joyous moment, a moment of great satisfaction but at the same time tinged with a little sadness as from tomorrow I shall not be having your company. But every good thing has to come to an end, and I could not have visualized a better end than this. We are really happy and



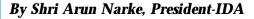
grateful that Shri A.T. Nana Patil, Hon'ble Member of Parliament from Lok Sabha could grace this occasion. In fact he had been instrumental in taking the Indian Dairy Association delegation to the Hon'ble Prime Minister and various ministers to invite them for the inaugural function.

Unfortunately, due to the elections and other pressing issues the Hon'ble Prime Minister could not come. 10 to 12 Members of Parliament who were to attend this Conference are also busy in their constituencies due to elections and were unable to attend. On behalf of Indian Dairy Association, its Central Executive Committee, IDA President, IDA Headquarters, Zonal Executive Committees and all the milk producers of India, Nana sir, I welcome you. You are not just a Member of Parliament but a dairyman as well. It may not be out of place to apprise the audience that Hon'ble Shri A.T. Nana Patil is basically a milk producer. I had the good fortune of being at his native place and saw where he used to milk buffaloes and then sell the produce. I am sure that he would like to elaborate on that in this session.

Once again I welcome all the dignitaries on the dais and the participants at this Conference.

Thank you so much.

Address



am the son of a farmer and still live on a farm. My son too lives on the farm. This is the fourth generation of farmers and we have around 35-40 buffaloes. I am the Chairman of the village dairy where milk is poured and I have been the Director of Kolhapur Zilla Milk Union for



the last 40 years. I have also served as its Chairman from 1992 to 2000. Hence my umbilical cord is always joined with the milk farmers. As the first

cord is always joined with the milk farmers. As the first farmer President, I went out for 15 days to different parts of the country. I travelled to Ajmer, Jaipur, etc and visited their cooperative societies. I also went to Anand and met the NDDB Chairman Shri Dilip Rath and the



previous Chairman Dr. Amrita Patel. I went to IDMC as well. All these travels and meetings have helped me in assessing the status of dairy industry as it stands today.

I would like to suggest a few points for this Plenary Session.

- ✓ Milk prices should be based on the cost of production plus 50% profit as suggested by the Dr. Swaminathan Committee.
- ∠ The income accrued from dairy is greater than that from agriculture, as the contribution of dairy to the GDP is 6.3% and agriculture only 4.1%. Hence more money should be allocated for dairving.
- At present dairying is included in Agriculture Z with no separate minister — we advocate a separate ministry for the same.
- Timely payment to producers by union or private ø companies is a must.
- Women empowerment and participation must be stressed upon.
- In case of droughts, fodder banks, silo systems ø etc should meet the feed needs of the animals.
- Harvesting of solar energy should be stressed Z upon.
- Steps should be taken to reduce methane emissions.

Thank you.

Address

By Shri R.S. Sodhi, Managing Director, GCMMF



t is a great pleasure to see so many farmers in the audience here at the Plenary Session. I will briefly share my thoughts concerning rural development in India, the importance future of animal and husbandry and dairy, the challenges we face and areas where we need support.

We all know that India is the largest milk producer in the world with 160 mt this year. But greater than that

MAY 2017

is the fact that we are also the biggest market in the world for milk and milk products. We don't need to depend on New Zealand and Australia etc for export. Whatever we produce is consumed and this is good for the economy and also speaks well for our food security.

Secondly, not only is our consumption high but the growth is also highest in the world. If we speak about milk production then our growth is 4.5% but as far as consumption is concerned in the organized sector or branded category, it is more than 10%. This increase in demand, therefore, depicts potential and bright future for all of us. No industry in India can guarantee a growth in volume by 10% in the next 50 years, be it IT or Telecom or FMCG. But with dairy we can say with guarantee that there would be a minimum 10% growth. And the reason for this is the 125 crore population of India.

By 2050, this population will grow to 170 crore number one in the world. We will leave China behind in 2025. Today this 125 crore population consumes 340 gm of milk per day. But our income is growing, our diets are changing, urbanization is taking place and people are leaning towards branded packed products. They are shifting from carbohydrate-rich diet to fat and protein-rich diet and it will not be incorrect to say that the consumption of milk will increase from 340gm per person to 800 gm by 2050. In the European countries it is 850 gm. 800 gm is not a big number and I think it will be reached easily. In Punjab it is already happening. Hence for 170 crore population, with an average consumption of 800 gm per person, how much milk do we need to produce? If we are producing 160 mt today then in 2050 we have to produce 540 mt of milk. How will we do that? There are already 300 crore milk producing animals in India. We cannot increase that population. If we look at our milk production today, 55% comes from buffalo and 45% from cow. Our requirement is 540 mt if we want to ensure food security, not depend on imports and give a good price to farmers.

We used to produce only 20 mt till 1970 but today we are producing 160 mt. The reason for this is the Operation Flood model of Dr. Kurien who advocated that farmers should not only produce but process and market the milk themselves. The Amul model was replicated in various parts of the country and production

plenary session

15th Dairy Industry Conference

grew from 20 mt in 1970 to 160 mt after 40 years. If we continue using this model I don't think that 540 mt is an unachievable target. And the best part of this model is that the farmer who produces milk gets the biggest portion of the price paid by the customer. In Europe or US if the consumer pays \$1 for 1 liter of milk the farmer gets only \$0.36 to \$0.38 of it. The rest is taken by retailers or processors. This is because farmers there do not take ownership of processing and marketing. In India, especially where cooperatives are managing the procurement, processing and marketing, if the consumer pays Rs. 1 then the farmer gets Rs. 0.80 to Rs. 0.86. This does not happen anywhere in the world. I am saying this because we go for world conferences, other countries want to follow India's model as farmers get good payment. So, with this model I don't think we need to learn from anyone or change anything. Of course there might be a few in it, which need to be rectified.

If we are to produce 540 mt and be self sufficient in food security then what are the challenges? Let me tell you about one of the biggest issues. Everybody knows that farming's contribution to India's GDP is 13% to 14%. In that animal husbandry contributes around 30% but if you look at the budgets of either Indian government or any state be it Gujarat, Maharashtra or Rajasthan, when it comes to resource allocation in the budget the animal husbandry's budget is only 5% to 10%. Rest of the budget is allocated to cultivation. That means those who have land get the seed subsidy, irrigation subsidy, electricity subsidy or crop loan. However the fact is 80% of people in the villages don't have land. So, almost all the budget of agriculture mostly goes to people with land. For those who rear animals or poultry in the villages, the budget is only 5% to 10%. Hence, we first and foremost demand that whatever is our contribution to GDP budget allocation should be based on that. Where Government of India resources or state's resources is concerned then animal husbandry is sidelined. The reason is that it is very tough to spend this. If you need to spend Rs. 10,000 crore on irrigation then the irrigation department will do that. But if funds are to be given for rearing animals or buy animals, get a milking machine, bulk milk cooler, for breeding then the government officers have to work very hard.

The second point worth noting is that in all the policies and schemes the word agriculture is used, dairy is not included. Animal husbandry is not included. Let me speak about income tax first. You know that income tax is not levied on agriculture. Recently demonetization took place on 8^{th} November 2016. It is good for us that there is transparency in the system now. Money is being deposited in the farmer's account. They will imbibe the habit of budgeting. Their credit worth will increase and if they need to take a loan then they do so from the bank and not from local lenders. However, when we used to give the price of milk to our farmers, 90% used to be in cash. Now the entire amount is being paid through the bank and transaction documents are there. Now the thing is, a farmer in the village who has 50 acres of land and has an income of at least ` 25 lakhs, he won't pay a single penny as income tax. On the other hand if he has just 5 animals and his transactions are through the bank he has to file income tax returns and if his income is more than 2-2.5 lakhs, he has to pay income tax. This is because the income tax says that dairy income is not included in agriculture. Hence, because of a small error of department

of animal husbandry not being included in agriculture, there is this issue of income tax. If a farmer rears 5 animals and earns $\hat{}$ 3-4 lakhs a year, he has to pay income tax. So, post-demonetization, we have to look into this matter.

Further, let us look at schemes made by the government — for instance crop loan for agriculture. Those who have land, sow wheat, paddy or cotton in 5 acres, and can take a loan of 50,000-60,000 per acre. But if a farmer buys a calf and rears it for 2.5 years he spends 15,000-20,000 rupees on that. He will, however, not get a loan for that. Only if we include animal husbandry in agriculture will our farmers get all the benefits.

India is the biggest dairy market in the world with the highest growth and thus all the dairy companies of the world are eyeing us. Those countries demand that we include dairy in free trade agreement. It will benefit 8,000 to 10,000 farmers here. But the point is, just to benefit 8,000 or 10,000 farmers should we deprive 6-10 crore families? In western countries, there are lots of subsidies on dairy. Dairy production by the farmers is huge but there is no growth. They know if they need to increase milk production then India has to open market. So, every three months a country asks India to include dairy in free trade agreement, which we have to constantly keep fighting.

Our respected Prime Minister has said that in the next 4 to 5 years we should double the income of every farmer. However, the average income of a farmer in the



village is ` 60,000. Of that ` 60,000 around 38% comes from agriculture or cultivation. 12% comes from animal husbandry. This is for an average farmer, even those who have land. But 80% to 82% of them are either landless or marginal farmers. If we look at their income, 30% to 32% is from animal husbandry. So, if we are to double the income of farmers in the villages, how will that happen?

According to 10 years old data, the growth rate from agriculture is 2.8% annually. But a farmer's income is increasing 14% every year from animal husbandry. So, if you want to double the income focus should be on the one with more growth rate, i.e. animal husbandry. We must ensure that in the next 30-40 years people should not migrate to cities because there will not be employment opportunities in the cities. With automation there is decreasing need for people — we have to keep the people in villages by doubling their income in the village. That will happen if we focus our policies towards animal husbandry.

In this context, our biggest challenge is how to attract this generation's educated youth towards dairy so that he stays in the village. Instead of going to the city if he lived in the village and reared 25 to 30 cows or buffalos, the investment would be around 20-21 lakhs and any bank would easily give him a loan of 15-16 lakhs. So, today's youth can earn ` 35,000-40,000 living in the village. Hence, if we are to double the income then we have to make today's youth interested in animal husbandry whilst living in the village and focus our schemes and investments in it. National Dairy Plan (NDP) is working on increasing productivity with feeding and breeding. I think that there should be a national level in-depth discussion as to what India's breeding policy should be like in the future. That is very important because I have attended lots of meeting and I have seen that those who are deciding don't even know the basics of it.

In the end I would like to say that if we are to increase animal husbandry and dairy products and meet future demands, it is only possible with the support of two main stakeholders — the farmer and the consumer. If they are happy the dairy sector will progress. If these stakeholders are not happy, it's very difficult for dairy industry to move forward.

Thank you.

Address

By Shri Rakesh Chopra, GM (Electronics, Vigilance), REIL



will be talking briefly about the technology advancements that are required in dairy industries. India is the biggest milk producing country in the world today and has maintained this position since 1999. As the requirement for milk is increasing, there is an increase in

energy and power requirements in dairy industries. I would take this opportunity to talk about the use of solar power energy in dairy industries. India is a large country and is blessed with at least 275 to 325 sunny days in a year. This augments well for solar installations in the country. At present, we have 400-700watt/sq. mt of solar installation but there is a great potential for further utilizing solar energy. The government's Jawaharlal Nehru Solar Mission speaks of around 750 giga watts. Unfortunately we have been able to utilize only 8.63 giga watts due to various reasons. I would request the government to provide subsidies to dairy industries — both cooperative societies or plants and private dairies.

NDDB has also emphasized on the importance of solar power in the ongoing National Dairy Plan (NDP). If we use solar energy we can reduce carbon footprints and CO2 emissions significantly. That is why I request all the dairy specialists and experts present here that all future dairy plants and dairies should now have provision for roof top solar installations. This will not only promote clean and green energy but also create a self sustained system. Today, there are technologies through which one can grid the excess power that is being generated. Hence, this surplus energy can become a source of income. Apart from this, many state electricity boards have started net metering — Gujarat and Maharashtra are leading in this regard. I request the Hon'ble Member of Parliament, Shri Patil to encourage net metering in electricity boards of all states. If net metering concept starts then our excess solar energy will become an extra source of income when it is fed

to the cooperative society's grid.

We can enhance the dairy value chain through the medium of energy security. In the small milk societies, we can place a solar power station of 2 kw capacity — in case of MCC a 10 kw can be placed and in the case of plants it can be in 200 kw. I belong to a technology firm and have worked a lot in this area having placed several roof top solar power plants in dairy plants. This includes 2 power plants of 100 kw each in Mother Dairy. We are also in the process of installing these in Kozhikode Dairy as well as in smaller societies.

Finally I would request the use of latest technologies to detect milk adulteration. We have digital machines today and I would request the government to provide subsidy for this to societies and dairies. During festivals, people stop consuming milk for fear of adulteration. But with the availability of low cost solutions, subsidies can easily be provided to farmers and dairies to purchase adulteration detection machines.

Address

By Prof. A.K. Misra, Vice Chancellor, Maharashtra Animal & Fishery Sci. University

> have been asked to about speak and academics issues related to educational institutions. Universities and institutions are the highest source of learning providing formal education to graduates, postgraduates, Ph.D students along with refreshers

courses for those who have passed but return for updated knowledge. These institutions also provide useful informal education. Diploma courses provided in these universities, training conducted for farmers and women who are involved in dairying and livestock breeding and for those who want to become dairy entrepreneurs have been very useful. It is through these institutions that our discussions and recommendations at this Conference can be transmitted to farmers, scientists and students. However, there are various issues like infrastructure of these universities and institutions, which is not satisfactory.

There are three kinds of models to be considered in dairy. First, the marginal farmers with 2-5 cows, then the dairy farms with 20, 25 or 50 cows, and finally those where 100 to 500 cows are kept. These three models of dairying should be taught in all universities and farmers of all three categories should be able to avail knowledge regarding its implementation.

We need to inform farmers about scientific management, breading and feeding, balanced diet, mixed diet, etc. There are issues regarding management, climate change and global warming about which they need to be aware. Health care is another big factor. We should make good on-site diagnostics, produce vaccines which are not available, and also make the vaccines which are available more efficient.

In return we should be looking at sustainable and self-sufficient farms, which have farm yard manure and various waste management practices. I am happy to tell you that I have given a sum of ` 5 crore to a college for making a green farm. I would want all the water generated on the farm to be recycled. Also complete power generation is required — we need to make gas from the cow dung and generate vermicompost from the slurry. If there is need for more power, we should put solar panels on the farms. And in order to develop these farms, the models need to be developed in the universities so that the farmer brothers or entrepreneurs and students can benefit. Further, obsolete equipments should be replaced with the latest technological inventions.

It is also important to realize that for the dairy industry to benefit, the institutions should attract the best talents for these courses. In India we produce just half of what is required. The faculty positions in universities are almost half vacant. A student who does BVSc prefers to go out and practice and earn much more, rather than contribute to the institution. He does not pursue post graduation which results in the lack of good teachers.

Secondly, I would like to flag the issue of research. Our contribution to agricultural GDP is 30%, around 4.5% to 5% in national GDP but we have never received commensurate money. Whatever money comes, is spent on agriculture and the remaining 1% to 2% is given to veterinary science and animal science.



Hence if funds are not available, we cannot develop technology. Increasing the shelf life of milk is a challenge in itself. There was talk about value addition and nutraceuticals. Unless and until we do this, the income of farmers will not increase. And if the income of farmer is not increased, he will not practice dairying. As per the report of Farmer's Commission, at any given point of time, 40% of the agriculture farmers are willing to leave farming. The situation for animal farming is even worse.

We do get some support from industries but it is important that maximum research be supported by the government. In Maharashtra we don't receive a single penny for research from the government. All the money is spent on salary and other heads. We take money for research from external sources or from the industries. It is important that more money comes to this sector.

Another major responsibility of these institutions is that of extension. The technology developed in the institutions should reach the farmers. We must introspect and lay down a sound system for this technology to reach the farmers as soon as possible. At this moment, ICT — Information Communication Technology has become a great tool. We should develop such technologies that can be quickly disseminated to framers and can be adopted easily.

These are some of the issues that I would like IDA to take note of and send in the form of recommendations. Thank you.

Chief Guest Address

By Shri A.T. Nana Patil, Member of Parliament

t is a matter of pride that this 45th DIC is being held in Maharashtra and that Shri Arun Narke belonging to this State has taken over as President of Indian Dairy Association. The speakers before me have pointed out issues pertaining to the dairy industry and some have given

MAY 2017



guidelines for the same. I do not have much technical knowledge of the dairy industry and neither am I as experienced as you all are but I would like to say a couple of things about this industry.

Dairy is a huge industry and if it is taken out of agriculture and given a separate portfolio it could lead to major developments. I have been trying for this for the past two years in Parliament and we have sent our request to the agriculture minister as well. Shri Narendra Modi, 'Vikas Purush' was scheduled to come for this Conference. Shri Narke. Shri Arun Patil and others from IDA came to me in Delhi for inviting him and even the Chief Minister wrote to him inviting him for the Conference. But elections are being held in the country including the Maharashtra corporation and city council elections. Hence our Chief Minister and 10-12 Members of Parliament who were supposed to come were unable to attend. However, on behalf of everyone I have come to you and all of us will definitely try to find solutions for whatever challenges pointed out here. In February, the Finance Minister and the Prime Minister both reiterated that farmers incomes needs to be doubled. Doubling does not mean to double the produce of the farms. If the productivity of the farmers' cows and buffaloes is increased it could be a very good source of income for them and for the women engaged in these tasks. In the budget this year ` 8,000 crore has been earmarked by Central Government for dairy production. State governments can also do a lot within their budgets. In Karnataka any farmer that sells milk in government societies is provided a dividend of `4/litre. If every state follows a similar pattern farmers can work efficiently and support their families by rearing cows and buffaloes.

In Maharashtra also farmers should be provided cows and buffaloes, and if the milk collected is poured to dairy institutes or cooperatives, the farmers can easily support their families. Even if one starts at a low level, one can grow a lot in this field. For instance, you must have heard of Chitale Dairy in Maharashtra — they started with just one buffalo. Today they produce 7-8 lakh litres of milk and are immensely popular due to their quality milk and milk products.

I am the son of a small farmer. When I was a student my family could not afford to educate me. There were 2 buffaloes in our house and when I was in class 10, I sold the milk from one buffalo to my neighbours. I would sell approximately 500 ml everyday.

plenary session

The price of milk was ~ 0.50 /litre at the time and I used to carry 2-3 litres of milk. Slowly I increased the milk production and started supplying in every house in my village carrying 15 litre buckets in both hands.

After my graduation I worked hard and increased the milk business. I used to collect 25,000 litres of raw milk and supply to various dairy farms. Subsequently, I started my own plant and supplied milk in Mumbai, Nagpur and Goa with a collection of over 1.20 lakh litres. Here I would like to say that if you cultivate good relations, you will do good business because in every village there is a customer who can bring 2-4 other customers. As a result, when I stood for Municipal Corporation elections I secured the maximum number of votes and was elected Municipal President. I grew from there and am now a Member of Parliament. I am proud to say that every time I stood for an election, I was elected with maximum votes. If we do something good people connect with us. It brings us popularity and is also beneficial for the people.

I belong to Jalgaon district and in 1985 the milk production there was around 5 lakh litres. Private dairies procured 7-8 lakh litres. Unfortunately, during present times, production has decreased in this district. People's interest in dairying has waned because of the low returns in lieu of the hard work and labour required.

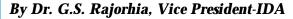
The price of milk has increased and the purchasing cost has also been increased for the farmer. Although sales have increased, even the buying cost has been increased. Hence, if we have to double the farmer's income he should get good money from the dairy business and government should provide subsidies for the same. Milk production would then certainly increase, not just in Maharashtra but in the whole country. Many issues have been raised here such as solar energy installation, exports and taxes etc. I think that if members of Indian Dairy Association sit with the Members of Parliament from Maharashtra we can discuss the issues with the Agriculture Minister, the Finance Minister and if required even with our Prime Minister who has always been proactive in addressing farmers' issues.

Today India is number one in milk production. However, we can further increase productivity in order to avoid import and actively start exporting milk. The business of dairy has a cycle of three years, sometimes it's good and sometimes it's bad. If it's good then there is a lot of profit but if it's bad then a lot of people perish. Three years back when milk powder was imported, none of the powder plants in India were looked after and they perished. But this year has been very good. Milk production as well as the market and rates are good. I am happy to say that today a lot of agricultural development has been taking place in Jalgoan. Over there the farmer who has had the maximum yield is awarded. A similar practice is carried out in 5 to 10 other states.

I am happy to see delegates from all over the country including Kashmir in this Conference. I have been in the milk business since the beginning and have always been with the dairy sector in every program of theirs. Even if others were unable to attend I made it a point to definitely come for the DIC as it is such a learning experience. I congratulate all of you for attending this Conference.

Thank you.

Vote of Thanks





am sharing my thoughts on this last event of the Plenary Session — the thanksgiving. This is the best occasion to thank all stakeholders and participants for having given a successful conclusion to the 45th Dairy Industry Conference. We are very happy and honoured with the presence of Shri Nana Patil,

MP. He had taken us along with several MPs to invite our Prime Minister despite the busy budget session and elections in various states. I am also happy that Shri Nana Patil has shown us how to successfully combine dairy business with politics and become an MP or MLA. We are very grateful for your support to dairying and everyone present here — dairy professionals, planners, industry personnel, researchers and students would be benefited by your speech Sir.

I would like to thank Shri Ram Chandra Choudhary



who has been the Chairman of Ajmer Milk Union since 1990 for his presence and invaluable inputs to the farmers. Shri Sodhi is one of us and his speeches are always impactful and informative. I thank you Sodhi Sir. Prof. A.K. Misra, Vice-Chancellor of Maharashtra Animal and Fishery Sciences University, has been known to me for a long time. He is an expert in animal production systems, has an impressive personality with 10 to 12 years of experience with NDDB and 15 years with Krishi Vishwavidyalaya. I thank you Prof. Misra.

The main concern behind any organizational event is money. Our sponsors whose names you can see posted on both sides of the stage have helped us a lot. We thank everyone from our hearts and hope that in future they will continue to invest in our events.

We have published an excellent Souvenir containing a number of advertisements. We would also like to thank all the advertisers because of whom our Souvenir has become more impressive.

I have attended a lot of exhibitions around the world — Europe, America, New Zealand and Australia — but thanks to the untiring efforts of Shri Arun Patil and through him Koelnmesse Y A Tradefair Pvt. Ltd., we could witness a world class exhibition here at the 45th DIC. Around 1350 participants have visited this Conference including industry representatives, Chairmen of corporate federations, their board of members, managing directors and milk producers. I thank all of them for their valued participation.

I am grateful to the Press and Media for the coverage extended to this event and would like to request them to write for farmers' betterment and thus promote dairy development. Shri Narke Sir, our President, has worked day and night for this event and I thank him too. Shri Arun Patil is like a younger brother, whenever he arranges such an event it is always the best and I thank him. I would also like to thank the management of these Halls for their services and utilities and ensure simultaneous events in all three of them. Members of the organizing committee have been working since months. Shri Ghanekar, MD, Gokul who lives in Kolhapur has been working tirelessly. Similarly there are many associates who also deserve kudos for their efforts. On behalf of Indian Dairy Association I am grateful to each one of them and thank them for the successful organization of this DIC.

We have amongst us Best Paper awardees, research workers, scientists and students who have given poster

MAY 2017

presentations and also written in *Indian Dairyman*. Our Past President Shri Banerjee who is 80 years old is seated amongst us, and his articles are still printed in *Indian Dairyman*. In fact, today he was the recipient of the first Best Paper award. I request all of you to contribute quality articles in *Indian Dairyman*. Your contributions will be significant as your experience will be shared not just within the country but abroad as well.

I would like to thank the agency responsible for the excellent audio visual systems throughout the Conference. Thanks goes out to the caterers for providing excellent food. The success of any conference depends on the speakers and chairpersons, all praise to them for fulfilling their duties so well. The technical sessions and industry presentations were laudable. Hasya Kavi Sammelan was very entertaining with all of us indulging in hearty laughter during the program. Shri R.G. Kulkarni, IAS who is the Dairy Commissioner of Maharashtra is amongst us and I thank him for his presence.

Finally, on behalf of everyone I would like to once again thank Shri Nana Patil for his help on dairying issues whenever we have approached him. Your continued guidance will be of great benefit to our farmers.

Thank you.

INDIAN DAIRYMAN