



AsianAgribiz

Where the animal protein industry finds and shares information



Solving feed challenges with sustainable thinking

By **Zahrah Imtiaz** - 18 April, 2022, AM



Looking at alternative energy sources such as solar panels at the feedmill provides a long term solution to high energy bills.



A crisis is a good time to revisit old practices and according to Harinder Makkar, international consultant on sustainable bioeconomy, the old should



Dr Makkar in an interview with *Asian Agribiz* explained that with the continuous rise in feed ingredient prices, energy, and feed, an overall look at how feed operations impact the three Ps, 'people, planet, and profit' dimensions of sustainability is important.

The 3 Ps

"If we start with the planet dimension, we ask how can feedmillers benefit from being custodians of the environment? It would be cutting down on wastage of resources," Dr Makkar said.

Feed production, from sourcing to mixing the final product, storage and transport, creates much waste. Avoiding waste in each of these processes, will not only save resources but also cut down on costs during difficult times, he explained.



Harinder Makkar

The higher the wastage, the bigger the carbon footprint and reducing this would also make the feed more environmentally friendly. "It would be producing more with less and this is profitable," Dr Makkar said.

To move towards this, feedmillers would first need to quantify the amount of wastage at different stages in the feed production chain. Then prioritize the stages to cut down on waste.

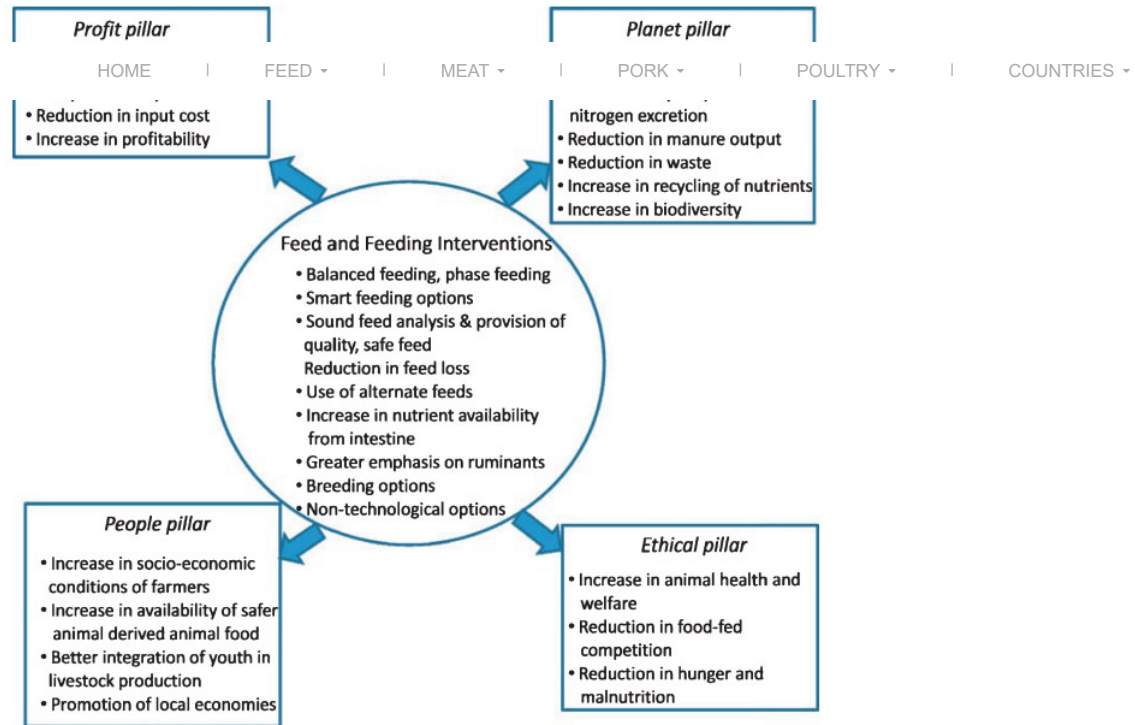
In terms of energy costs, investing in renewable energy (e.g. solar powered feedmill operations, at least some to begin with) would not only save money but also help reduce emissions through fossil fuels.

As energy prices continue on an upward trajectory, this would augur well for both the bottom line as well as the environment. Use of energy-efficient feed processing plants would also help, he said.

Dr Makkar who has undertaken extensive research into sustainable animal feed production for the FAO, noted that moving forward, the industry would have to pay greater attention to the challenges of climate change and their impacts. One such challenge is the increasing prevalence of mycotoxins as global temperatures rise.

"The greater the challenge of mycotoxin, the more expensive feed production is going to be and there will be more rejections," he stressed.





The chart shows how the 3 Ps as well as an additional pillar of 'ethics' can be followed to make animal feed production more sustainable (Source: Makkar, 2016).

Innovation the way out

Thus, the solution would be to constantly innovate with sustainability in mind. For example, when it comes to breaking the cycle of corn-soybean dependency, Dr Makkar said feedmillers need to start investing in alternative ingredients.

A varied use of ingredients would expose them less to the vagaries of the corn-soybean grain market. If these alternatives are locally or regionally available, all the better as it would also lower the carbon footprint in sourcing.

"These changes are not easy to make as the current feedmilling process has been designed to accommodate corn-soybean diets. But we must not forget that 60-70 years ago, soybean itself was considered an alternative ingredient and a lot of r&d was invested in it to make it more suitable for livestock," he said.

Similarly he sees this change happening in alternatives such as insect meal, where research is intense in making it a mainstream source of animal feed protein.

A diverse animal protein and energy palate also means there is less competition for these grains with human food. Dr Makkar noted that close to 40-45% of the grain produced globally go towards livestock and biofuel production. Reducing the dependency on human food grain, helps companies care for the 'people' aspect of sustainability.

This is important as consumer consciousness matures in Asian markets, and they start looking at how food is being produced. "In this context the focus



Choose your own path

For companies that are yet to embark on their sustainability journey, Dr Makkar advised that they should not wait for customers to start putting pressure on them to reduce their carbon footprint or think of sustainability.

"Start preparing now to make the necessary changes in a slow and steady manner. Learn from the experiences of western countries and move in that direction. When the time comes, the companies that are prepared, will have a front row seat for better growth," he suggested.

Change however is difficult, especially in countries where traditional practices are heavily ingrained into the system. Thus, Dr Makkar said companies wishing to change must take the lead, and first define what 'sustainability' means to them.

"They should drive the sustainability agenda themselves and set targets, where they say, ok in five-year's time, we will reduce the use of 'X' grain from 70 to 40%, reduce wastage by 50%, and reduce the use of fossil fuel by 40%, as some examples."

Similar targets can be agreed for other sustainability parameters, and this approach can then be extrapolated to the overall industry and eventually country in which they operate in.

Dr Makkar emphasized, "sustainability is a journey, and each should travel on a path that works for them. What is important is that you take that first step."

Read more:

[Feed formulation needs to be agile to survive a crisis](#)

[Rising prevalence of mycotoxins and the missed risks](#)

[NIR technology can increase use of alternative feed](#)

Zahrah Imtiaz

Editor, Asian Feed Magazine and FeedWatch, Colombo, Sri Lanka. The Russian-Ukraine war has intense implications on the world grain markets and Zahrah has her fingers on the pulse with articles like, 'Wheat, corn markets shudder over Russia-Ukraine conflict'.





+65 6276 1055



com.....



25 International Business Park #02-103, Singapore
609916

© 2022 ASIAN AGRIBUSINESS MEDIA PTE LTD. ALL RIGHTS RESERVED

HOME

Feed

Million challenges presented by alternative ingredients

FEED ▾

MEAT ▾

PORK ▾

POULTRY ▾

COUNTRIES ▾



PORK

Dutch pork gains traction in Indonesian market

Feed

Poultry suffers as Indian feed grain exports grow

Poultry

Processed eggs market to reach USD35b in 2028

Meat

Poultry

