

Consumer Sector

 30th September, 2021

Plant-based meats: Small but gaining muscle

At a global level, there has been a movement towards alternative protein food products, especially towards plant-based protein food consumption, in the last two decades, with vegan & vegetarian food increasingly going mainstream in many developed countries. To gain some insights into this growing trend, we went through articles, BCG's report and interacted with a fast-growing domestic player. While tracing the origin of this concept is difficult with many countries/regions following vegetarianism for centuries, the plant-based protein movement (with a growing chorus for veganism) began as a way of living that involves making prudent dietary & lifestyle choices to minimize harm to the environment as well as health. Animal agriculture is one of the biggest contributors to greenhouse gas emissions globally and hence a plant-based protein diet is being promoted to reduce adverse effects on the planet. In terms of macronutrients, any plant-based product has zero cholesterol and in plant-based meats (PBM), the protein content is more or less similar to meat. It also has a very high dietary fiber compared to any animal-based protein products (dairy, meat, egg etc.), which has zero dietary fiber, thus being bad for digestion. ~70% of India's population is non-vegetarian and consumes relatively low quantities of meat ("flexitarians"). Hence, their conversion to PBM seems to be relatively easy. Further, India remains a highly protein-deficient country and hence there is significant scope for the consumption of PBM. Besides PBM & other plant-based protein foods (dairy, egg etc.), microorganism-based protein and animal-cell-based protein also come under the purview of alternative protein. However, the latter two are at an extremely nascent stage in the developed countries, with research & experiments still underway to fully reach optimum taste, texture & cost. Hence, their entry in India is likely only in the distant future. Through this short sector thematic, we have tried to highlight the potential of PBM market and its current landscape in India.

Evolution of the PBM industry: While PBM is a relatively novel concept, especially in India, 'mock meat' is not a new concept and has been around since ~2,000 years, primarily in China where kings that converted to Buddhism wanted to consume meat but without any violence involved, leading to the invention of tofu, tempeh & seitan. The meat industry was undisrupted for generations till new methods were developed in the developed nations, especially in USA. This trend has now spread across the world with mock meats/PBMs being made through advanced technologies using protein denaturation, machine designing etc. to get a product very close to meat. The process is iterative, resulting in better versions of existing products every year besides aiding the development of new & improved products. Eventually people are starting to understand that animal-based food industry has a lot of negative implications not just for the animals, but also for the environment and human health. In the western world plant-based alternatives to animal products are becoming mainstream, but things are also heating up in India and Asia where there is a lot of latent demand which is gradually manifesting now.

R&D, target audience and marketing: Till consumers don't adopt the plant-based meat category easily, the space will continue to remain R&D intensive in order to improve the taste & texture profile and to reduce cost. For most PBM brands, the target audience is meat eaters or flexitarians, since for lifelong vegetarians there may be a mental block which might make them hesitant in trying these products. On the contrary, it has also been observed that vegetarians who get over their initial resistance and try these products, become avid consumers because of high satiation due to protein density & the taste of the product. However, global and domestic companies are largely targeting meat-eaters by making them aware about the health & environment benefits without compromising on the taste or texture. An anecdote to the same is Beyond Meat's decision to sell their products in the refrigerated meat aisle when they first launched in USA and their conscious efforts to market themselves as direct competitors to the actual meat products. In terms of marketing, brands have to ensure that consumers try & experience these products in a more finished form (i.e., dishes rather than raw products) in order to ensure conversion to these products in the very first instance. Hence, for PBM companies to succeed in India, they have to get their marketing strategy right to encourage consumers to try these products.

Opportunity in India: As of today, the PBM market in India is estimated at ~US\$30-40mn, largely driven by consumer (packaged) food followed by a small share by HORECA. In a normal scenario, the market size in India is likely to touch US\$500mn (excluding exports which is a multi-billion US\$ market) three years from now, again driven by the consumer (packaged) food category. Contrary to the belief that consumption of PBM is just a metro-centric phenomenon, there is evidence that consumption is also being seen in interior parts of India where consumers are open to try these products and are making repeat purchases. Opportunity in Food Services is still unexplored in India: (i) For HORECA, what is happening in the West (see exhibit 13) will get replicated in India, rather more strongly since India has strong vegetarian values. Even people who eat meat in India are primarily vegetarians, who consume meat once or twice a week, whereas in the western world, meat eaters consume meat three times a day. (ii) Opportunity in QSR Food Services is at a pilot stage. While meat will be a primary driving force for brands like *McDonald's*, *Domino's* and *Burger King*, there is potential of 5% of sales coming from PBM menu options, depending on how the space evolves. At the global level, even a brand like *KFC* is thinking about introducing PBM. However, like any new category, the future of PBM has an element of uncertainty to it with a recent [media article](#) questioning the pullback of aggression shown by international QSRs in promoting their PBM products in the global markets. But there seems to be a massive latent need for more plant-based meat alternatives, which has not yet manifested fully and thus, the opportunity in this space is huge with the category still evolving in India. Acceptance of soya chunks (a protein rich product) further gives us confidence about the potential of the PBM market in India given that nutrition & good health are key drivers of both these segments. The size of the soya chunks retail market in India is ~Rs20bn, comprising branded & unbranded segments, with both having an almost equal share in terms of value. Within the ~Rs10bn branded soya chunks market in India, West Bengal is +1/3rd of total size. Growth in the branded market is expected to outpace growth in the overall category. With a CAGR of 13.7%, the market is expected to reach Rs19bn by FY25.

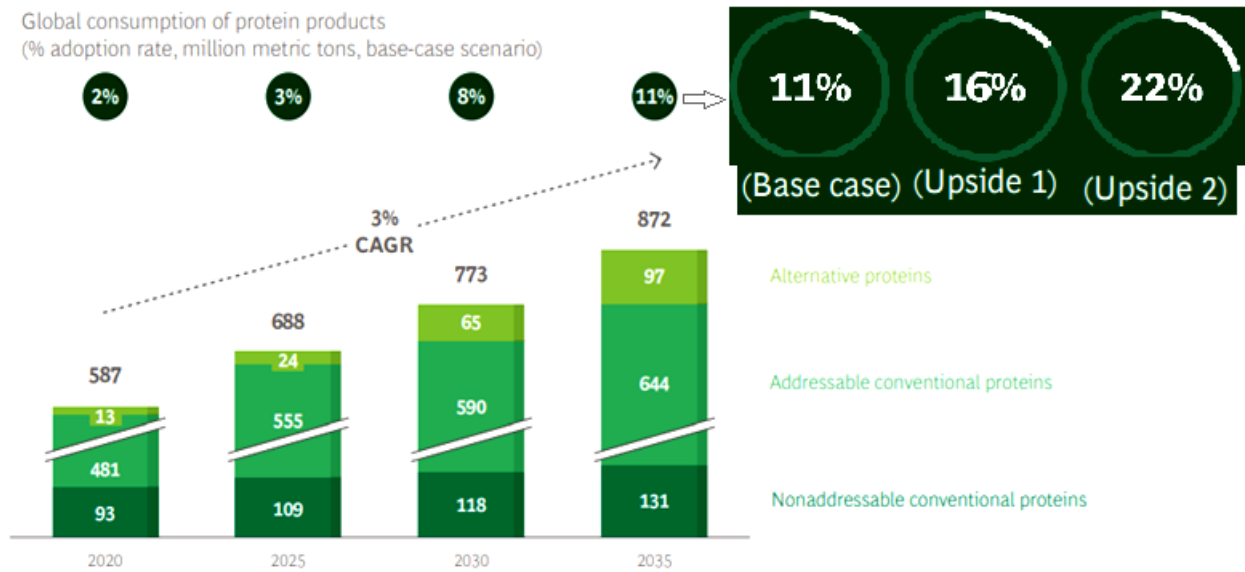
Players in India: Given that every product has a different set of formulations, different set of equipment is required for the same and it is not just a plug & play format, replication of existing products by global FMCG majors is difficult. Hence, in India, the PBM space is dominated by startups (see exhibit 22), who have made rapid progress. However, MNCs like Nestlé and Unilever have been acquiring and even organically launching PBM products (see exhibit 12) globally and hence their entry in India can't be ruled out. Further, Cargill, Tyson Foods and JBS (world's largest meat processing company based out of Brazil) have entered this space globally after waiting to understand whether this is a passing fad or a long-term shift. In India, Ahimsa Foods and Vezlay are some of the older players in this space and Imagine Meats is one of the new entrants. While it is too premature to talk about market share, in our recent interaction with the management of GoodDot (detailed interaction takeaways given below), they mentioned that the company commands significant market share.

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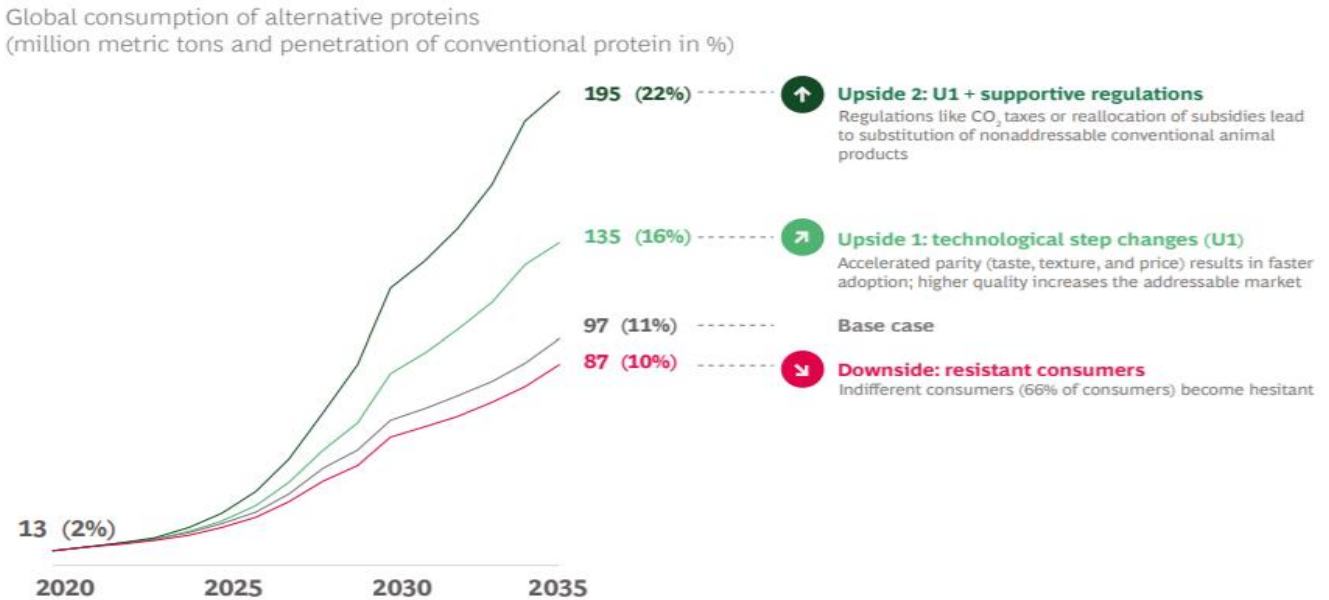
GLOBAL SCENARIO IN CHARTS

Exhibit 1: In a base case scenario, alternative proteins will very likely account for 11% of the global protein market (including conventional animal-based products such as meat, seafood, milk, eggs & dairy, but excluding traditional plant-based foods such as pulses, tofu & tempeh) in 2035



Source: BCG, Nirmal Bang Institutional Equities Research

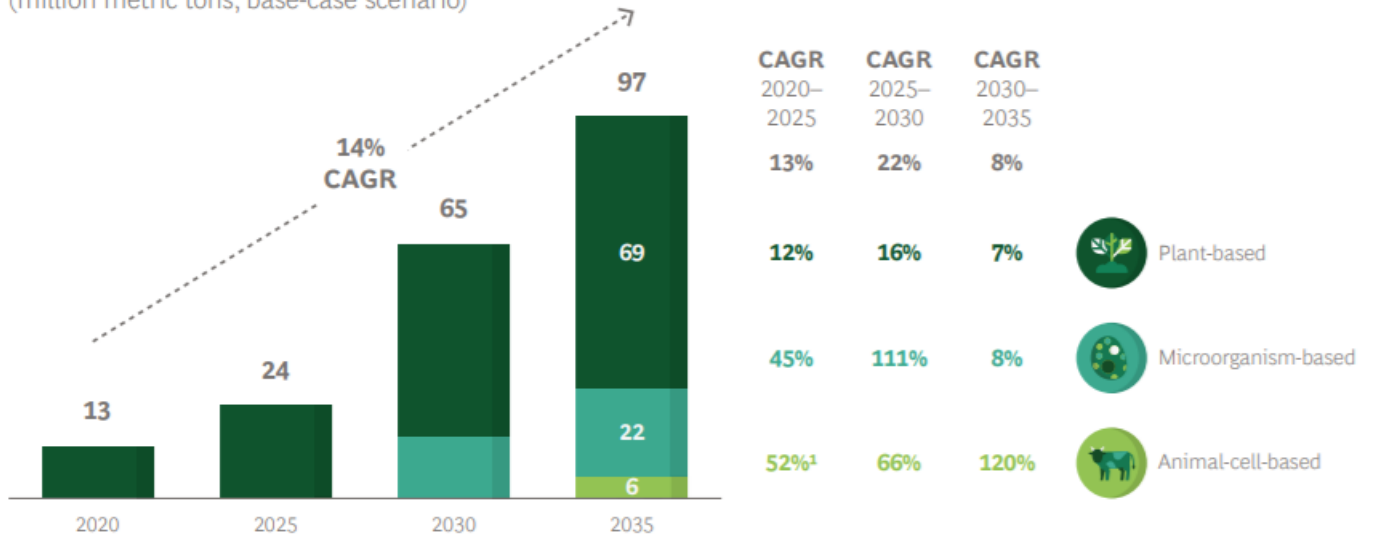
Exhibit 2: In a blue-sky scenario, alternative proteins could claim as much as 22% of the overall protein market by 2035. But, even in an unpleasant scenario, it could comprise 10% of the total protein market



Source: BCG, Nirmal Bang Institutional Equities Research

Exhibit 3: Alternative protein consumption will grow in three waves - plant-based, microorganisms-based and animal-cell-based, but plant-based protein will continue to dominate the overall market

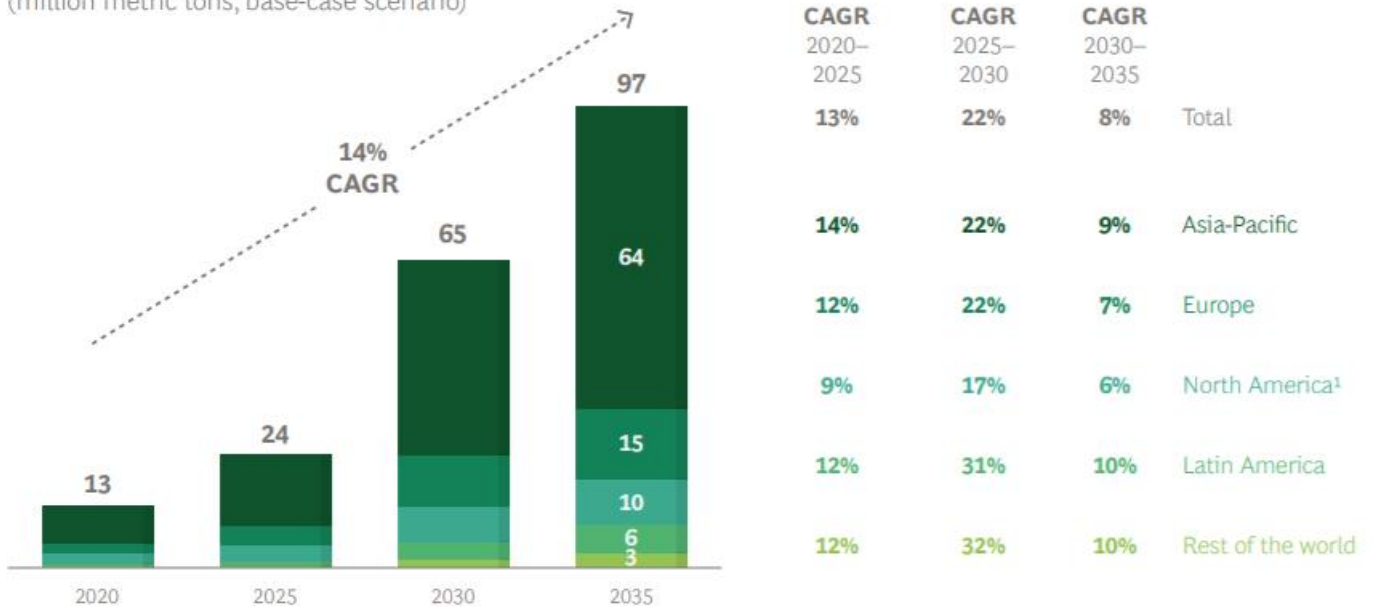
Consumption of alternative proteins by protein source (million metric tons, base-case scenario)



Source: BCG, Nirmal Bang Institutional Equities Research

Exhibit 4: Asia-Pacific - the largest market for alternative proteins will continue to grow the fastest

Consumption of alternative proteins by region (million metric tons, base-case scenario)

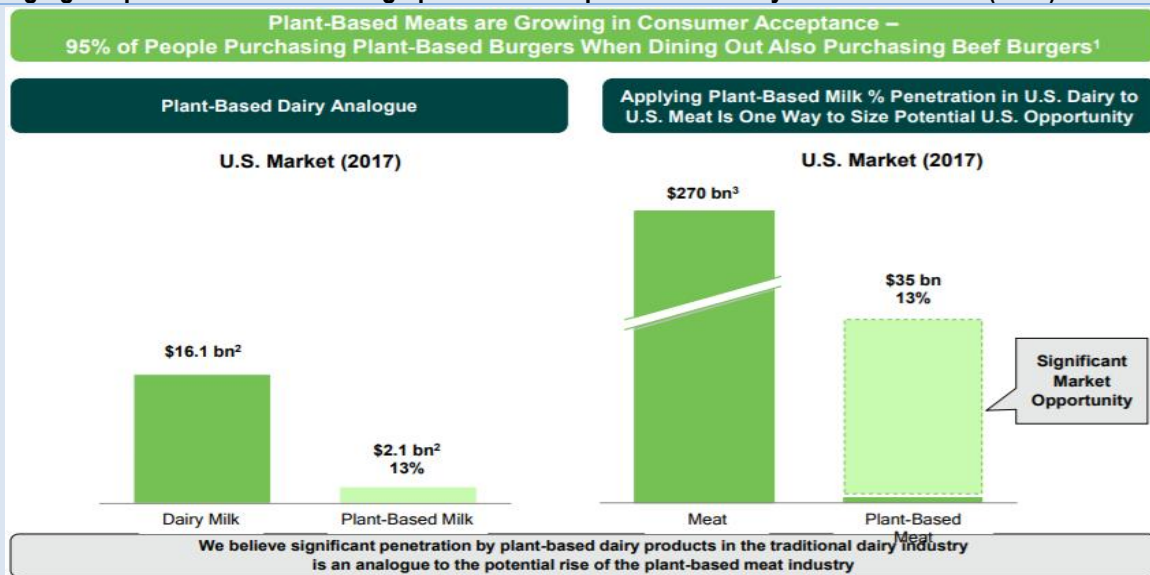


Source: BCG, Nirmal Bang Institutional Equities Research;

BEYOND MEAT CASE STUDY

- The Beyond Meat company was founded in 2009 by Ethan Brown, a California-based entrepreneur and a vegan, with focus on environmental issues. The company's mission is focused on PBM alternatives, using pea and other plant protein isolates.
- Opportunity: The company believes that growing consumer awareness about the perceived negative health, environmental and animal-welfare implications from animal-based meat consumption has resulted in a surge in demand for viable plant-based protein alternatives. A key analogy for both, the approach towards the opportunity and the scale of the opportunity is the strategy employed by the plant-based dairy industry to capture a significant market share of the dairy industry in USA. The size of the non-dairy milk category in USA was +US\$2bn in 2019 i.e., ~13% of the size of the dairy milk category. The success of the plant-based dairy industry was based on the strategy of creating plant-based dairy products that tasted better than previous non-dairy substitutes, and were packaged and merchandised adjacent to their dairy equivalents. Applying the same strategy to the PBM category, it can grow to be at least the same proportion of the ~\$270 billion meat category in the US, which over time would represent a category size of \$35 billion in the US alone. As a market leader in the PBM category, Beyond Meat believes that it is well-positioned to capture and drive a significant amount of this category growth. It also believes that there is a significant international market opportunity for its products.

Exhibit 5: Gauging the potential of PBM through penetration of plant-based dairy in the US market (2017)

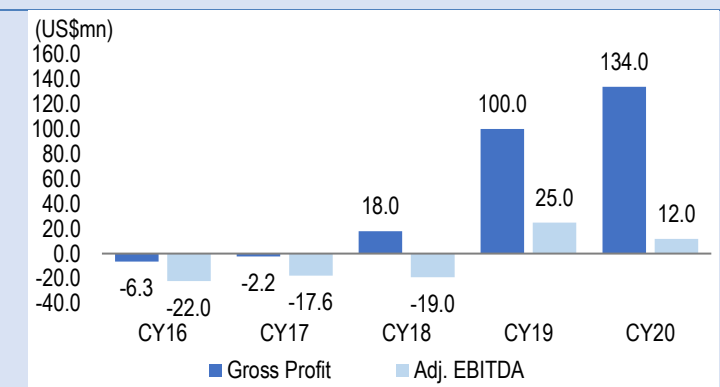
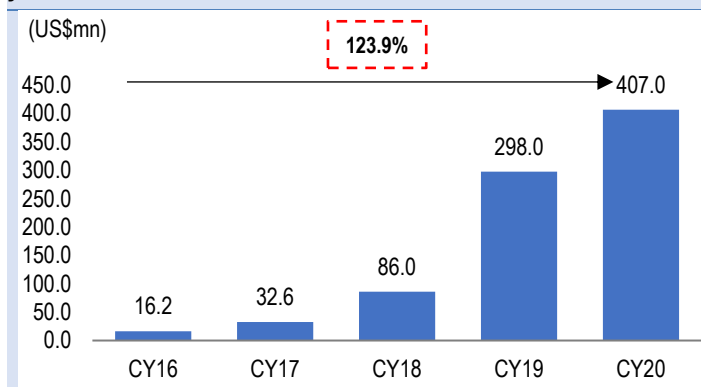


Source: Company, Nirmal Bang Institutional Equities Research

- The company's initial products were launched in USA in 2012.
- Over 2013-2016, the company received venture funding from Great Point Ventures, Kleiner Perkins, Obvious Corporation, Bill Gates, Biz Stone, the Humane Society and Tyson Foods. Tyson Foods had a 6.5% stake in Beyond Meat but exited in April'19 - ahead of the company's IPO. By 2018, Beyond Meat had raised US\$72mn in venture financing. *Beyond Meat* is also backed by celebrity and athlete investors such as Leonardo DiCaprio, Jessica Chastain, Snoop Dogg, Liza Koshy, Chris Paul, Kyrie Irving, DeAndre Hopkins and others.
- The company offers plant-based options in beef, pork and poultry categories. As of June'21, *Beyond Meat* products are available in ~119,000 retail and foodservice outlets in over 80 countries globally.
- In 2020, more US households bought *Beyond Meat* products (US household penetration for the *Beyond Meat* brand increased to 5.3% in 2020, +200bps vs 2019). Also, they bought them more frequently (purchase frequency increased 39% and *Beyond Meat's* repeat rate increased to 55.3% vs 43.4% in 2019). On average, they spent more per household on these products (buyer rates increased 66% to a category-leading level despite *Beyond Meat* having significantly fewer SKUs than some of its primary competitors).

Exhibit 6: Revenue has grown at 123.9% CAGR over the last 4 years

Exhibit 7: Company is generating profit at EBITDA level



Source: Company, Nirmal Bang Institutional Equities Research

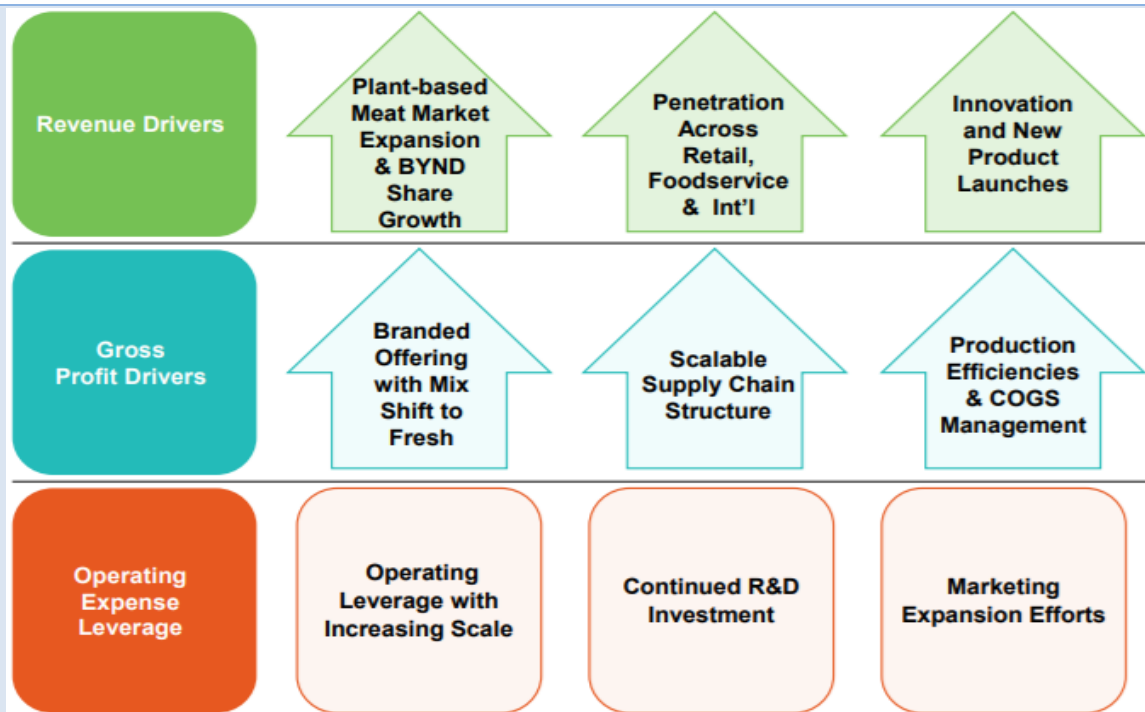
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 8: From selling a plant-based chicken substitute to Whole Foods in 2012/2013, the company's offerings have come a long way



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 9: Key financial drivers for the company

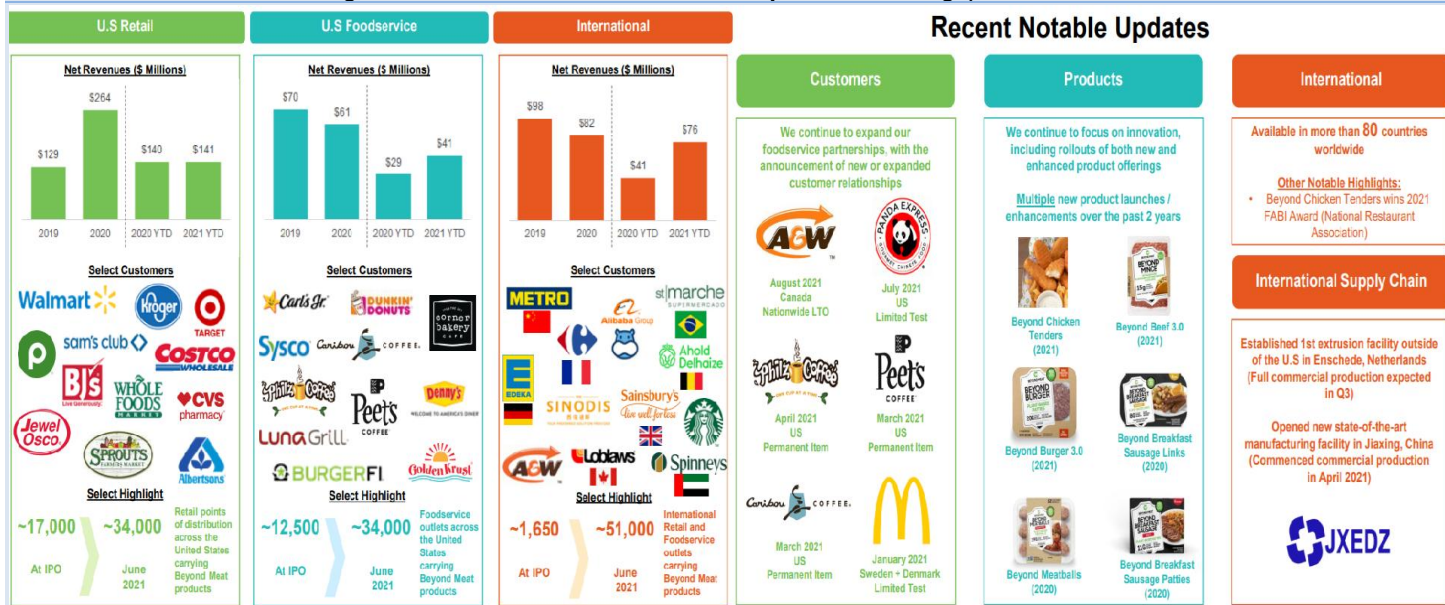


Source: Company, Nirmal Bang Institutional Equities Research

- The company entered CY20 with ~50:50 balance across retail and foodservice channels, only to swiftly change to ~90:10 ratio as restaurants, hotels, stadiums, universities and other foodservice customers shuttered their doors or otherwise restricted services due to COVID-led restrictions.
- Progress in food services business:
 - In July'19, Dunkin' Donuts announced that it would start selling breakfast sandwiches using the Meatless Sausage product in Manhattan, with plans for national distribution beginning 6th Nov'2019.
 - In Nov'20, *Beyond Meat* announced a collaboration with *McDonald's* for the development of the *McPlant* option, a plant-based patty and chicken substitute. It started testing *McPlant* in Denmark and Sweden in Feb'2021. *Beyond Meat* also announced the launch in China of a plant-based version of minced pork.

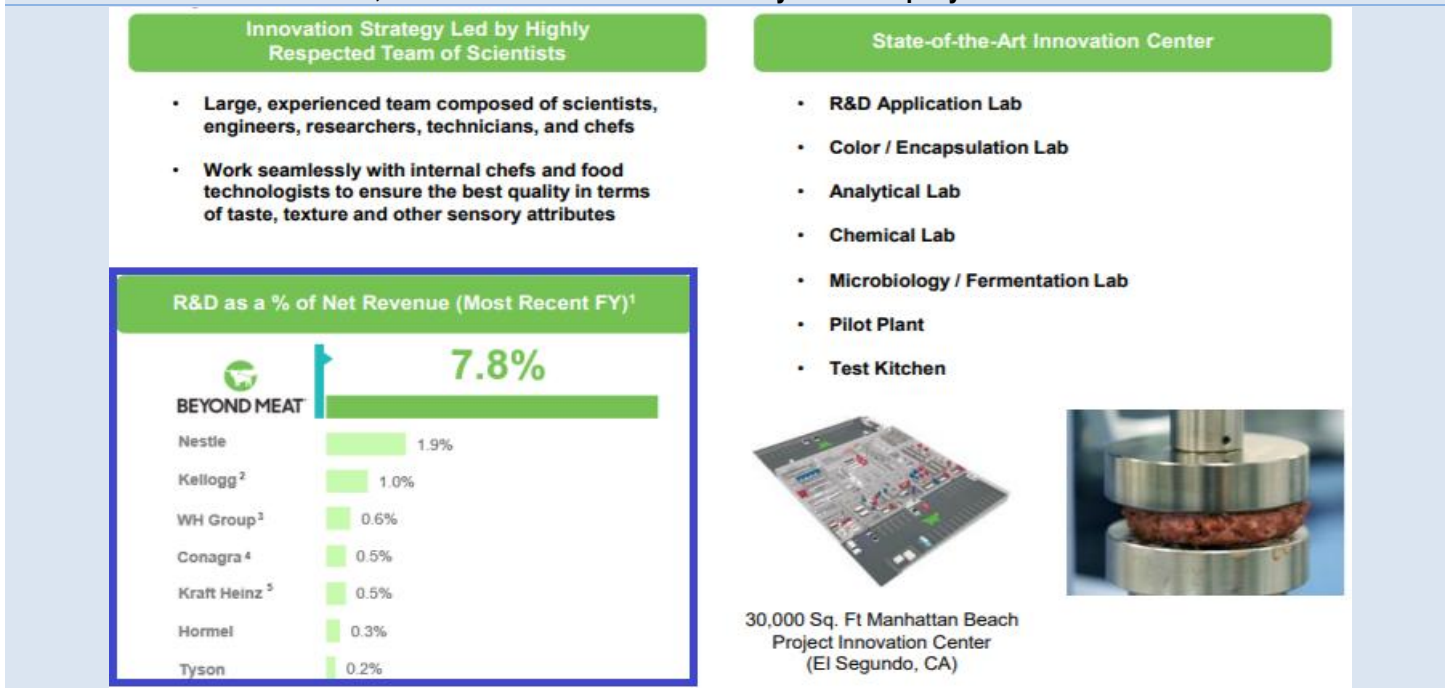
- c. In Jan'21, *Beyond Meat* and PepsiCo announced a joint venture called The PLANEt Partnership to develop and market plant-based snacks and drinks.
- d. In Jan'21, *Taco Bell* announced a collaboration with *Beyond Meat*, initially as a test case and then as a permanent option for a new plant-based protein food.
- e. In Feb'21, *Beyond Meat* started a partnership with *McDonald's* and *Yum Brands*. These deals will bring new choices to the food menu, such as the *McPlant* Burger and the plant-protein based pizza toppings, chicken alternatives and possibly taco fillings for Yum Brands' restaurants *KFC*, *Taco Bell* and *Pizza Hut*.

Exhibit 10: Sales by distribution channels and recent notable updates (including expansion of foodservice partnerships and focus on innovation, including rollouts of both new and enhanced product offerings)



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 11: As mentioned earlier, innovation will beat the core of any PBM company



Source: Company, Nirmal Bang Institutional Equities Research

- In China, Beyond Meat operates an owned manufacturing plant in Jiaxing. It is the company's first "end-to-end manufacturing facility" outside USA and began full-scale production in 2021.
- Founded in 2011, *Impossible Foods* is possibly the closest and most comparable competitor to *Beyond Meat*. The company announced another round of funding shortly after the IPO of *Beyond Meat*, raising US\$300mn. It is now backed by investors such as Khosla Ventures, Google Ventures and Bill Gates. *Impossible Foods* is creating "bleeding" burgers and is currently working on replicating whole cuts of meat. Similar to *Beyond Meat*, the company was founded out of environmental concerns and with a view to using science in creating the right texture and attributes of meat using plant-based proteins. The company does not intend to go public in the near future.

Exhibit 12: Some of the launches/acquisition/partnerships by MNCs (FMCG & food processing companies) are highlighted below which indicate that PBM is not just another passing fad

Unilever				
Year of launch/acquisition	Brands	Geography	Products	Other comments
Acquired in Dec'18	The Vegetarian Butcher	<p>After acquiring Netherlands-based The Vegetarian Butcher in 2018, Unilever expanded the plant-based meat brand in +45 countries in 4 continents</p> <p>The brand has also started working with QSRs like Burger King for +25 countries</p>	<p>High-protein soy-based sausages</p> <p>High-protein soy-based balls</p> <p>High-protein soy-based crumbs</p> <p>Soy-based burger, source of protein</p> <p>Soy-based chicken style nuggets, source of protein</p> <p>Vegetarian sausages</p> <p>Vegan chicken style chunks</p> <p>Soy-based escalope</p> <p>Rebel Whopper, Plant-based Whopper, Plant-Based Nuggets, Vegan Royale</p>	In Nov'20, Unilever set a global sales target to net €1 billion (US\$1.2 billion) from plant-based meat and dairy alternatives by 2025-2027. The aim is to roll out <i>The Vegetarian Butcher</i> brand and ramp up vegan alternatives from brands, including <i>Hellmann's</i> , <i>Magnum</i> , <i>Ben & Jerry's</i> and <i>Wall's</i> .
Partnership forged in May'21	Unilever has announced that it will partner with food-tech company ENOUGH (formerly 3F BIO) to bring new plant-based meat products to the market. ENOUGH's technology uses a unique zero-waste fermentation process to grow a high-quality protein. Natural fungi are fed with renewable feedstock, such as wheat and corn. This produces <i>Abunda</i> mycoprotein, a complete food ingredient containing all essential amino acids. This is also high in dietary fiber. Initially, <i>Abunda</i> will be applied to Unilever's existing meat products under <i>The Vegetarian Butcher</i> brand, and eventually to make new products.			
Nestle				
Year of launch/acquisition	Brands	Geography	Products	Other comments
Nestlé invested in the brand early on in its trajectory and acquired it entirely in 2017.	Garden Gourmet	Europe (~15 countries) in retail and OOH channels	<p>Garden Gourmet Vegan Balls</p> <p>Garden Gourmet Vegan Fillet Pieces</p> <p>Garden Gourmet Vegan Sensational Burger</p> <p>Garden Gourmet Vegan Mince</p> <p>Garden Gourmet Vegetarian Breaded Fillet</p> <p>Garden Gourmet Vegetarian Burger Deluxe</p>	-
Acquired in Sep'17	Sweet Earth	USA primarily in retail (as well as OOH)	Multiple products across formats, including plant-based bacon, bowls, burritos, pizza, plant-based & grounds, plant-based seitan, chicken etc.	-
Oct'19 (Australia) Dec'20 (China), Apr'21 (Malaysia)	Harvest Gourmet	China, Australia, Malaysia in retail and OOH channels	<p>Harvest Gourmet Chargrilled Pieces</p> <p>Harvest Gourmet Schnitzel</p> <p>Harvest Gourmet Sensational Burger</p>	-
Jul'21	Scientists at Nestlé Research in Lausanne are working with Future Meat Technologies, a leading Israeli cultured-meat start-up, to explore the potential of cultured-meat components that do not compromise on taste or sustainability. Future Meat Technologies' novel and cost-efficient proprietary technology can produce non-GMO cultured-meat components from animal cells, therefore reducing the need for land and resources to raise animals.			
Cargill				
Year of launch/acquisition	Brands	Geography	Products	Other comments
Feb'20	NA	USA in retail food and foodservice channels	Patty and ground products	Cargill's new private label plant-based patties and ground products were launched by retailers and restaurants in early April'20.
Apr'20	NA	China (partnership with KFC)	Plant-based fried chicken	Trial was conducted for a few days
Jun'20	PlantEver	China in retail	<p>Chicken-alternative nugget</p> <p>Beef-alternative patty</p>	-
Apr'21	Cargill announced that it is investing in Bflike, a start-up producing ingredients that can be used to improve alt-meat products. Bflike was created by Dutch incubator BOX NV. The start-up's most interesting innovation is its patent-pending vegan fat and blood platforms, which will make it possible to create meat and fish alternatives with extremely realistic tastes and textures. As part of its collaboration with Cargill, Bflike will license its technology and pre-made ingredients to food manufacturers and retailers who are developing their own meat alternatives.			

Tyson				
Year of launch/acquisition	Brands	Geography	Products	Other comments
Jun'19	Raised & Rooted	USA in retail channel	Product line includes burgers, ground, sausage, RTC nuggets & other RTC products	After selling its 6.5% stake (through Tyson Ventures) in Beyond Meat in 2019 (pre-IPO), Tyson Foods announced its own new plant-based brand. The initiative made Tyson Foods the largest US meat producer to enter the growing alternative protein segment with its own products.
JBS				
Year of launch/acquisition	Brands	Geography	Products	Other comments
Mar'20	Ozo	USA in retail channel	Product line includes Burgers, Ground, Mexican-Seasoned Ground and Italian-Style Meatballs.	The new plant-based protein brand is under JBS USA's division Planterra Foods
Acquired in Apr'21	Vivera	Europe (25 countries) in retail channel	+15 products including multiple formats like meatballs, burger, nuggets, bacon, kebabs, steak etc.	JBS has announced that it has acquired Dutch plant-based meat maker Vivera in a €341 million (US\$410 million) deal. The move by the world's biggest meat processing corporation is part of its strategy to "boost" its plant-based platform in response to shifting mainstream consumer demand.

Source: Company, Media, Nirmal Bang Institutional Equities Research

Exhibit 13: International QSRs have been introducing plant-based options in their menus across the globe

Examples of global QSRs introducing plant-based options across the world (ex-India) Global QSRs introducing plant-based options in India

Burger King launched the *Impossible Whopper* in USA in August'19. Besides USA, the plant-based *Whopper* is available in 30+ countries



Beyond Meat announced the launch of the *Beyond Famous Star* burger at Carl's Jr. in January'19 followed by the launch of *Beyond BBQ Cheeseburger* in Oct'19 in USA



Subway launched *The Beyond Meatball Marinara* in USA and Canada in September'19



McDonald's soft launched *McPlant* in Canada, Sweden, Denmark 2HCY19 onwards and has introduced it in UK and Ireland in September'21



In September'21, Domino's Indonesia has added two new meatless items to its menu, developed in partnership with homegrown start-up Green Rebel Foods.



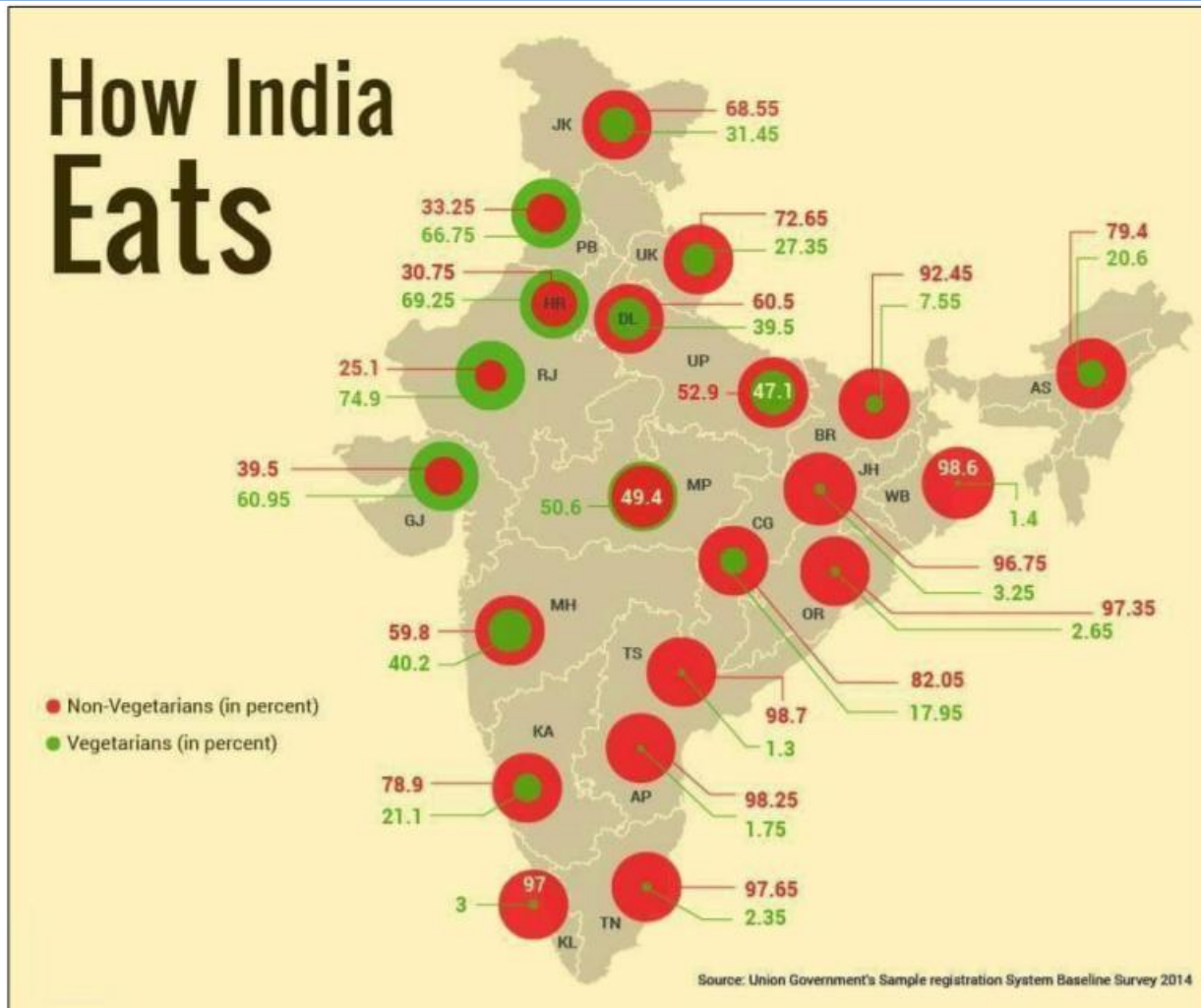
Domino's (Jubilant Foodworks) introduced the *Unthinkable Pizza*, made entirely from plant-based proteins



Source: Company, Media, Nirmal Bang Institutional Equities Research;

DOMESTIC CONTEXT

Exhibit 14: 70% of India's population is non-vegetarian and consume relatively low quantities of meat (sometimes referred to as "flexitarians")



Source: USDA report, Nirmal Bang Institutional Equities Research;



Company profile: GoodDot is a food tech start-up bringing plant-based proteins to India that can be distributed anywhere and bought by everyone. Using a special technology, it turns grain and plant proteins into products that look like meat, taste like meat and are better for consumers. Presently, GoodDot sells its products through direct-to-consumer channels, e-commerce platforms as well as more than 8,000 offline stores. Apart from India, the company has presence in international markets like Canada, Dubai, Nepal, South Africa and Singapore. GoodDot is looking at venturing into markets such as USA and Europe in the coming months. It also planning to expand its retail QSR outlets under two formats 'GoodDo' and 'GoodKhana', which are currently in Mumbai, Delhi, Udaipur, and Kathmandu.

Key highlights from our interaction with Mr. Abhishek Sinha, Co-founder and CEO, GoodDot

About GoodDot

- Mr. Abhishek Sinha (Co-founder and CEO) is a chemical engineer by qualification and was a part of the Indian Revenue Service prior to this venture.
- GoodDot was started from an ethical perspective. Mr. Sinha was a meat eater but as an animal lover, there was a dilemma (he liked the taste of meat but was not comfortable with animals being killed). Hence, he stopped eating meat in 2013. There was no large-scale study done by the company, rather, it followed a bottom-up approach with a belief that if a consumer is given a choice to consume meat from plants without killing animals, they would want to consume the same, subject to the taste being very similar and product being affordable. GoodDot believes its products meet both these criteria.
- The brand is targeting meat eaters or flexitarians from day one. For lifelong vegetarians, there may be a mental block, which might make them reluctant in trying these products. But interestingly, it has been observed that vegetarians who try these products and get over their initial reluctance become avid consumers because of the high satiation on account of protein density and taste of the product.
- Being one of the early movers in this new category, GoodDot is trying to create demand across segments. It is primarily selling through RCM, which makes the brand's products available to ~8,000 brick & mortar stores in India. GoodDot also caters to consumers through its own website (D2C platform), Amazon, Flipkart, etc. It is slowly also on-boarding the modern trade (MT) channel and is already supplying to Metro Cash & Carry, a Bengaluru-based retailer and is in talks with Reliance, Big Bazaar, Foodhall & Big Basket and will eventually go for general trade (GT). It also exports to Canada, South Africa, Nepal, Mauritius, Singapore & Dubai and plans to enter USA & UK in the next 2-3 months. In the food service space, the brand is providing its products to some HoReCA properties of Marriott, Leela, etc. *Dominos* has also started using the company's products in its *Unthinkable Pizza offering*, in certain regions.

Financial, management & leadership standing

- The company has been clocking 100% growth from a decent base for the past few years. Even on a MoM basis, it has clocked 300% growth in September'21. Management believes that the company will continue its 100% growth trajectory this year too.
- The company has already achieved break-even in 2018. As of today, at a company level, GoodDot is EBITDA & cash positive and is not burning cash.
- GoodDot's entire R&D is in-house. The company has a team of 150-160 individuals, out of which 20-25 are in R&D. The R&D team comprises protein chemists, food technologists, flavor experts etc. and most of them have been with the company since inception and hence there is significant in-house R&D expertise.
- Until recently, GoodDot was largely bootstrapped, after which it raised funds from Sixth Sense Ventures. It will keep raising money to fund faster expansion.
- Within the management, besides Mr. Abhishek Sinha, Mr. Deepak Parihar (co-founder & CFO), a CA & CS gold medalist and former group director & CFO of Miraj, is GoodDot's CFO. Mr. Abhinav Sinha, who was an ISB alumni & has a PhD in protein chemistry from Oregon, USA, is also a part of the core product development team and heads GoodDot Foods, which is into Vegan QSRs. Ms. Shruti Sonali, with an extensive experience in the hotel & restaurant industry, looks after culinary development. Mr. Harish Joshi, who has wide experience in spices & product development, is in charge of GoodDot Spices, which is in the manufacture of innovative condiments & spices. There is a core team of 10-12 senior executives from the field of engineering, finance, operations, R&D and marketing. The company believes that expansion of its team is a continuous process and is also aware that it will need a lot of muscle power to crank up its revenue numbers. It has also recruited other senior level functionaries recently. It has a dedicated team of experts in D2C, modern trade and exports.

Product portfolio & why the company entered international markets

- Currently, its product portfolio includes meat chunks, which can be used for any cuisine. They account for 50-60% of total sales, with the balance 40-50% coming from India-oriented products. For a few international markets, the brand has come up with specially curated dishes like stroganoff or meatless mince, which may not work well in India but may work really well outside India.
- The brand's products are available across India, including states like Bihar, Chhattisgarh, Nagaland, Jharkhand etc. apart from the metros. Hence, contrary to the belief that consumption of PBM is just a metro phenomenon, consumption is seen rising in the interior parts of India too where consumers are open to try out these products and are making repeat purchases.

- GoodDot's products are working very well in East India (Bihar, West Bengal, North East) and South India given that these are majorly non-veg consuming areas. Top 10 cities for the brand comprise heavy meat consuming regions and sales are driven by repeat purchases (not just trials).
- **International presence (exports):**
 - a. The reason for going international is that the market is quite mature there.
 - b. None of the geographies that the company is currently present in were consciously chosen by it but the choice was rather driven by queries from these markets and hence the brand got exposed to international markets.
 - c. The company ensured that it ventured carefully outside India since it didn't have a prior presence or any strengths in these markets. Hence, it had to partner with someone who had strong foothold in those countries. The GoodDot team used its expertise to customize the product as per local market requirements. So far, the collaboration model has worked very well.
 - d. The company uses its own brand name for the international markets as well.
 - e. Products exported have a shelf life of 12-18 months. Hence, there is no need for cold storage logistics and it saves associated incremental costs.
 - f. GoodDot is in talks with a few global players in the meat space and the top management of these companies are saying that the world is changing and that they want to adopt these changes (and have feet in both the boats) rather than becoming outdated.
 - g. From a regulatory perspective, the company's facility is ISO 9001 & 22,000 certified, Halal certified, USFDA certified and BRC certified. Some of the certifications have to be renewed annually. Most of the products include normal ingredients (unlike innovative or novel ingredients) and hence no regulatory challenges are faced.
- There is money to be made in both international as well as Indian markets. There is huge opportunity outside India and the company wants to tap the same while creating a category in India.
- Product pipeline:
 - a. The company would launch 3 products in the first week of October'21 in the Indian market.
 - b. In the international markets, three additional products will be introduced, which have already been ordered at a bulk level for introduction in the second week of November'21 in Canada.
 - c. Few base innovations will be launched next year.
- The company has not yet launched milk products (*Lyke*), but will launch them soon. Spices business (GoodDot Spices) adds to the strength of the existing business and reduces cost of the end product. Spices would contribute ~15% to total revenue, including captive consumption.
- The company would launch *Unmutton Keema* in a couple of weeks (early October'21), which is likely to be the best product till date in a package format for the brand. A Keema Pav made from the product is being priced at an amazing price point of Rs29 (A Mutton Keema Pav normally costs between Rs69 and Rs149 depending on the location).
- Management believes that next year will be the tipping point for this category in terms of consumer awareness as well as for the HoReCa segment.

Exhibit 15: GoodDot's product portfolio



Source: Company, Nirmal Bang Institutional Equities Research

How is the product marketed?

- The company intends to stay true to its vision and market its products as plant-based meats.
- Without judging dietary habits, the brand intends to give a solution and an option to its target audience, which meets their expectations of a meat product.
- It continuously endeavors to make it easier for the consumer to try the brand's products by improving its taste and reducing cost.
- As of now, the company is not bifurcating consumers on the basis of age. However, it is looking at some brand endorsement partnerships and influencer marketing to make the brand easily identifiable by consumers, especially the youth. But interestingly, there are a lot of people above the age of 40 years who consume PBMs since they are restricted from eating products like red meat or have health concerns like cholesterol. Despite the market being fragmented, consumption is across all segments. Hence, the company has not zeroed in on any demographic & age group-based strategy, but is specifically targeting meat eaters.
- If the consumers try/experience the product in a more finished form (i.e. dishes rather than the raw product), they will convert to the product at the very first instance. Hence, for plant-based meat companies to succeed in India, they have to devise the right marketing strategy to encourage consumers to try these products. Once they try these products, there is no going back and that has been the experience so far. The company has its Instagram, YouTube and Facebook channels where it shares recipe videos. Further, the company is also coming up with products in finished formats and shelf stable formats (not frozen) through new technology (like sterilization) to boost easy consumption. The new launches would include kits, wherein everything is available inside the box and one only needs to follow the instructions to experience the product (as per the company's expectations). Even outside India, the company is coming up with curries, meal kits and combo meal trays.
- Creating awareness and brand building:
 - a. Till date, organic branding (through GoodDo & HoReCa) has worked for the company, but now the management believes that it is time to step up the accelerator. Hence, a lot more branding from the company's side will be visible.
 - b. GoodDot has raised funds from Sixth Sense Ventures recently and will keep opting for this route to raise more funds in order to build the category.
 - c. There are more players entering the space (for example Imagine Meats). Some big FMCG players are also interested in this category and are likely to enter this space soon. This will help raise more awareness among the consumers about this category.
 - d. The company has done the hard part of creating the product and building acceptance. Now, it is ready to crank up the sales numbers, increase capacity and enhance advertisement & marketing.

GoodDot vis-a-vis international players, market standing in India and competitive intensity

- There are two big international players - one is already a decacorn (a company valued at over US\$10bn) and is also listed on the NYSE, Beyond Meat. The second one is on its way to becoming a decacorn, Impossible Foods.
- Examples of GoodDot rubbing shoulders with these players in the international forums and holding its own:
 - a. In an event in Singapore, organized by Temasek Holdings & Singapore Economic Development Board a few years back, seven global alternate protein companies were curated, including Impossible Foods & Eat Just from USA, LikeMeat from Germany and GoodDot from India. Within these, GoodDot performed very well at the annual showcase event in Singapore and an LOI for distribution for South East Asia was signed with them.
 - b. In Alternate Protein Summit in Amsterdam, GoodDot's products were showcased alongside players like Beyond Meat. Further, at a commercial level, Infinite Foods, which is the master distributor in South Africa for 2 decacorns – one of plant-based meat (Beyond Meat) and another of plant-based dairy (Oatly), has also become a distributor for GoodDot. GoodDot plans to further expand in Africa. Even in Mauritius, GoodDot is selling alongside Beyond Meat and Oatly.
 - c. GoodDot was selected as the only global company to serve at the first-ever Vegan Banquet in 125 years at the Parliament of World Religion in Toronto, Canada.
 - d. GoodDot was cited by The Economist as one of the three global best practices to achieve the UN Sustainable Development Goals.
 - The management does not see any company as competition and wants to focus on the company's own journey, which is based on offering a product which is affordable, shelf stable at ambient temperature and a tasty alternative to meat.
 - In terms of cuisines, while Beyond Meat is making sausages, burgers and nuggets, India eats meat in a chunk format (either in biryani or in tikka or in kebab). Hence, GoodDot finds Beyond Meat more of an ally because they have created the category outside India and have created a buzz around this space, which GoodDot can also capitalise on.
 - It is a massive market and has space for many companies. Still, people will max out their capacities.
 - Ahimsa Foods and Vezlay are some of the older players in this space and Imagine Meats is one of the newer players. While it is too premature to talk about market share, management believes that GoodDot holds significant market share already.
 - The work that the company has done in the past 8 years since the product development stage led to gaining a lot of knowledge in terms of how to work with the plant-based products, consumption preferences etc. GoodDot is utilizing every bit of this knowhow and is also focusing on continuous innovation.
 - With partnership with RCM, there was no scope for soft launching new products and hence from the start, the company's products were launched at a mid-scale level, which also helped it to understand scale from the start.
 - The trickiest part while scaling up has been to maintain shelf stability of the product and keep refining taste.
 - Creating awareness about the category and about the GoodDot brand are the next challenges that the company would like to overcome.
 - Given that every product has a different set of formulations, different equipment is required and it is not just a plug & play format, replication of existing products by even global FMCG majors is difficult. Hence, in the PBM space, start-ups have attained very good progress.
 - Some potential risks that the company sees for itself:
 - a. Not fully utilizing the opportunity which is presenting itself.
 - b. The channel strategy might go wrong.
 - c. The need to keep innovating and maintaining the pole position as global players like Nestlé and Unilever etc. will soon come up with their own plant-based meat products. However, team GoodDot is confident about maintaining its position based on the moats it has created in this space.

Comments on its vegan QSR brand 'GoodDo'

- A consumer looking for PBM option would prefer going to a 100% vegan restaurant so that they don't have to waste time glancing at the ingredients list or have only select options to order from.
- Scalability & standardization becomes difficult for standalone restaurants or restaurants with few outlets since these formats are chef-dependent and maintaining quality becomes difficult beyond a certain point. Hence, GoodDo prefers bringing a fast-food like culture with a twist of Indian food, which can be controlled through the brand's central kitchen or factory, thereby delivering uniform taste across outlets.
- The brand would expand the number of cafés (largest format for GoodDo) in existing markets of Mumbai, Delhi, Udaipur and Kathmandu. Some flagship outlets in certain cities across India might also be added.
- The company is coming up with smaller innovative formats for the brand, which would be very asset light and will be easy to breakeven faster (details out in a month). GoodDo is targeting 50 such small outlets in the next 6-8 months across India. Once these are streamlined, the brand would look at further expansion.

Exhibit 16: GoodDo menu offerings



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 17: Price comparison (Plant-based & meat based)

Format	GoodDot's products (plant-based)	Approx. price for 1kg (Rs)	Competing product (plant-based/meat-based)	Approx. price for 1kg (Rs)
Chunks	PROTEIZ (Rs85 for 200gms) [made from soya flour, soya protein isolate, pea protein, gram flour, oat flour, etc.]	425	Saffola MealMaker SOYA Chunks (Rs99 for 400gms)	248
	Vegetarian Bytz (Rs185 for 250gms) [made from soya flour, soya protein isolate, pea protein, gram flour, oat flour, etc.]	740	Fortune SOYA Chunks (Rs145 for 1kg)	145
			Nutrela Mini Chunks (Rs50 for 200gms)	250
			Desi Treat Vegan Mock Meat (Rs350 for 500gms)	700
			Wellversed Vegan Meat (Rs399 for 200gms)	1,995
			Urban Platter Classic Vegan Meat (Rs270 for 200 gms)	1,350
			Wakao Raw Jack Vegan Meat (Rs300 for 300gms)	1,000
			Licious: Chicken Curry Cut Small Pcs (Rs159 for 526gms)	302
			Licious: Chicken Boneless Cubes (Rs255 for 450gms)	567
			Licious: Lamb Boneless (Rs879 for 500gms)	1,758
Value-added	Veg. Achari Tikka (Rs181 for 200gms)[made from soya flour, soya protein isolate, pea protein, etc.]	905	Urban Platter Vegan Meat (Soyabean) Tikka (Rs250 for 100gms)	2,500
			Desi Treat Achari Soya Tikka (Rs350 for 500gms)	700
			Desi Treat SOYA Tikka Punjabi Masala (Rs350 for 500gms)	700
			Licious: Fish tikka (Rs329 for 350gms)	940
			Licious: Amritsari Fish (Rs279 for 300gms)	930
			Licious: Amritsari chari Murgh (Rs299 for 450gms)	664
			Licious: Chicken Tikka (Rs299 for 450gms)	664
Shredded	Proteiz Plus (Rs131 for 150gms) [made from soya flour, soya protein isolate, oat flour, pea protein, quinoa flour, etc.]	873	Eat with Better Tender Shredded Jackfruit (Rs225 for 250gms)	900
			Licious: Chicken mince keema (Rs275 for 450gms)	611
			Licious: Chicken mince large pack (Rs525 for 900gms)	583
			Licious: Goat mince keema (Rs575 for 500gms)	1,150
			Licious: Lamb mince keema (Rs575 for 500gms)	1,150
Rice-based	GoodDot Vegetarian Biryani (Rs188 for 300gms)	627	Freshway Ready to Eat Pack - Veg Hyderabad Biryani (Rs280 for 200 gms)	1,400
	GoodDot Vegetarian Pulao (Rs188 for 300gms)	627	Tata Q Spicy Vegetable Biryani (Rs198 for 330gms)	600

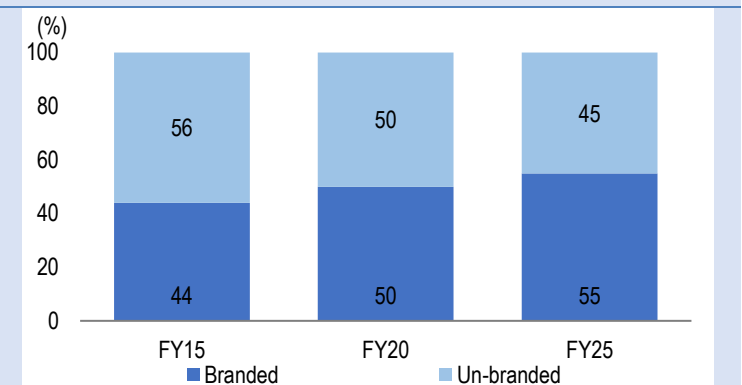
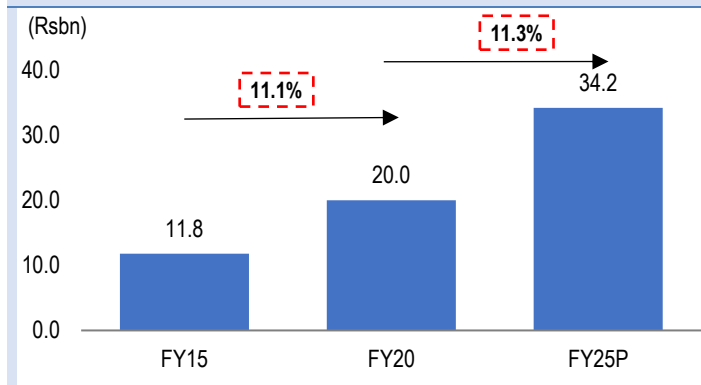
Source: Company, Media, Nirmal Bang Institutional Equities Research;

GLIMPSE OF SOYA CHUNK MARKET IN INDIA

- The acceptance seen in the soya chunks (protein rich product) market gives us further confidence about the PBM market's future in India given that nutrition & good health are key drivers for both these segments.
- The size of the soya chunks retail market in India is ~Rs20bn, comprising branded as well as unbranded segments with both having an almost equal share in terms of value. The total market for branded soya chunks in India is ~Rs10bn with West Bengal accounting for +1/3rd of the total size.
- Growth in the branded market is expected to outpace growth of the overall category. With a CAGR of 13.7%, the market is estimated to touch Rs10bn in FY20 and is expected to reach Rs19bn by FY25.
- Growth in soya chunks is led by the eastern and northern regions of India, which contribute 80% to the total market for soya chunks (branded & unbranded) as recipes such as soya chunks, dry soya granules bhurji, soya chap, soya pulao, etc have been a part of regular diet in these regions since the 1990s. Soya chunks provide an alternative to cottage cheese in north India and meat in the eastern region. Consumption in the western and southern regions has remained relatively low and wider acceptance in these regions may require advocacy and integration with traditional recipes.
- Sales in urban areas contribute ~80% to the total sales in the branded segment. Modern trade is a significant channel for the sale of branded products as the adoption is restricted to urban centers. This category has been dominated by edible oil majors (soybean) who have an established infrastructure for soybean oilseed crushing and refining.
- The key players in the branded soya chunk market include Ruchi Soya's *Nutrela* (40%), Adani Wilmar's *Fortune* (18%) and Emami Agrotech's *Healthy & Tasty* (5%). Marico has also recently ventured into soya chunks under its *Saffola* brand.

Exhibit 18: Soya Chunks' retail market in India has grown at ~11% and is expected to grow at a similar pace in next 5yrs

Exhibit 19: Growth in branded market is expected to outpace growth in the overall category

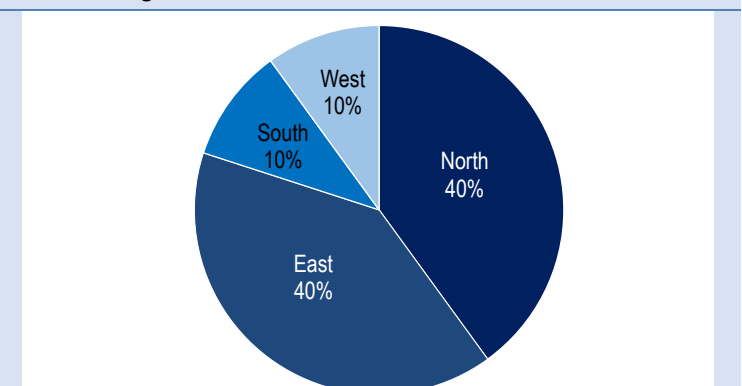
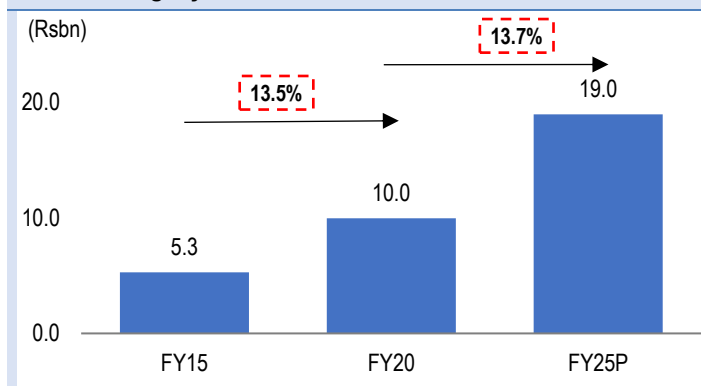


Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 20: Branded market is expected to almost double itself in the coming 5 years

Exhibit 21: Growth in soya chunks is led by the eastern and northern regions of India



Source: Company, Nirmal Bang Institutional Equities Research

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 22: Excerpts from USDA's report on Plant-based Meat substitutes - Competitive landscape in India

Origin	Firm/Brand	Description
United States	Archer Daniels Midland	Archer Daniels Midland (ADM) recently partnered with Imagine Meats, an Indian producer of plant-based meat substitutes. ADM will source raw ingredients and will take part in a technology partnership to manufacture products under the Imagine Meats brand. Imagine Meats plans to develop plant-based versions of traditional Indian dishes such as biryani, kebabs and curry developed from soy and pea proteins.
	Beyond Meat	Tiffany Foods, a subsidiary of Allana Group, recently began importing Beyond Meat patties and sausages into the Indian market. These products have been marketed through Urban Platter, a popular e-commerce site, in the cities of Bangaluru, Delhi and Mumbai. The product has been well-received by local consumers with demand outpacing supply. In addition, Tiffany Foods plans to introduce Beyond Meat products in popular grocery retail outlets, including Foodhall and Nature's Basket.
India	Ahimsa Foods - Veggie Champ	Delhi-based Ahimsa Foods offers vegan versions of hot dogs, chicken, mutton, duck, fish and burgers made with soybeans, wheat, mustard and spices.
	Blue Tribe Foods	Blue Tribe Foods is a Mumbai-based start-up that offers meatless chicken nuggets and chicken keema.
	Evolved Foods	Evolved Foods offers ready-to-cook, low fat plant-based meat substitutes.
	EVO Foods	EVO Foods specializes in manufacturing egg-substitute products. It recently launched a plant-based liquid egg product made from protein derived from lentils, with no cholesterol or antibiotics.
	GoodDot	Udaipur-based GoodDot utilizes soy, wheat, and pea protein to manufacture vegan mutton, wraps, meals, starters, kebabs, burgers and Thai curries. Their products are available at grocery stores, e-commerce sites, and GoodDot's food stall franchise, GoodDo.
	GreenestFoods	GreenestFoods manufactures plant-based meat substitutes derived from soybean and chickpea protein isolates combined with coconut fat and flavorings.
	Imagine Meats	Imagine Meats is a start-up company founded by Bollywood celebrities Riteish and Genelia Deshmukh. The company has partnered with ADM and the Good Food Institute to design plant-based meat products suitable for the Indian palate, including plant-based biryanis, kebabs and curries.
	Mister Veg	Faridabad-based Mister Veg specializes in designing plant-based meat and seafood alternatives. Jubilant Ingrevia Ltd. invested an amount of Rs42.5mn in Mister Veg Foods Pvt. Ltd. in April'21.
	Nutrela	Nutrela offers a range of soy-based products, including soy chunks and soy granules.
	Oh Veg	Jaipur-based Oh Veg offers vegan meat chunks, shreds and slices made from chickpeas, wheat protein and beetroot with no additives or synthetic ingredients.
	Plantmade	Plantmade offers plant-based egg, dairy and mayonnaise alternatives.
	Supplant Foods	Supplant Foods produces chickpea flour and advanced protein for vegan food manufactures.
	The Living Food	Bangaluru-based The Living Food Co. offers vegan cheese products.
	Urban Platter	Urban Platter offers various meat substitutes through its e-commerce site, including jackfruit-based meat and Beyond Meat products.
	Vegeta Gold	Chennai-based Vegeta Gold produces plant-based meat alternatives to fish, mutton and chicken. The company utilizes textured vegetable proteins, soy proteins and mushrooms as the main ingredients for their products.
Vegitein	Bengaluru-based Vegitein produces vegan hot dogs.	
VeZlay	VeZlay offers ready-to-eat, plant-based meat products made from soy proteins. Their products include soya shawarma, soya kabab, nuggets, soya chop, soya leg piece and vegetarian chicken.	
Wakao Foods	Wakao Foods is a Goa-based start-up company specializing in jackfruit-based meat substitute products, which require no refrigeration and can last up to one year. At present, the company is supplying its products to 30 vegan-friendly stores in Goa, high-end restaurants and hotel chains, including the Grand Hyatt and JW Marriot.	

Source: USDA report, Media, Nirmal Bang Institutional Equities Research;

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