

**IPACST**Intellectual Property Models for  
Accelerating Sustainability Transitions[www.ip4sustainability.org](http://www.ip4sustainability.org)

## Nutriset® Case study

© Pratheeba Vimalnath, Frank Tietze, Maximilian Elsen  
Innovation and Intellectual Property Management (IIPM) Laboratory,  
Institute for Manufacturing, University of Cambridge, UK

### Intellectual Property Strategy for Humanitarian Aid: A Social Impact Case Study of Nutriset®

*With over thirty-five years of success in treating malnutrition across countries with vulnerable population, Nutriset®, a mission driven, innovative nutritional product-based private sector pioneer offers insights into using intellectual property (IP) to contribute towards achieving the United Nation's sustainable development goals (SDGs). Nutriset® has been recognized for its strategic use of IP to create positive socio-economic development. The company is one of the very few that has been awarded the European Inventor Award by the European Patent Office (EPO) and Patents for Humanity award by the US Patent and Trademark Office (USPTO) in 2015. As of today, Nutriset® Group contributes to ten of the 17 SDGs. The company's malnutrition business contributes particularly to the no poverty (SDG#1) and zero hunger (SGD#2) goals. What started as a family business in 1986, has manifested into a giant social sustainability contributor with local production sites in 12 locations predominantly in least developed countries (LDCs) and Low- and middle- income countries (LMICs). The company has 60 research partnerships worldwide as of 2021<sup>1</sup>. Amongst other factors, the strategic use of IP by Nutriset® has contributed to reaching a turnover of €114 million in 2019. Nutriset®'s product ranges have supported over 10 million beneficiaries worldwide as of 2021 while at the same time improving the standard of living of employees in the LDC/LMIC. According to Thomas Couaillet, Managing Director of Nutriset®, such a growth wouldn't have been possible for Nutriset® without its IP strategy.*

***“Clearly if we had not had an IP strategy at the beginning of 2000, we were not being able to set up local companies in many countries... We cannot talk about development in this context without IP. It is closely linked. The sustainable devoted business model we have right now is clearly linked to the IP strategy we took.”***

***- Thomas Couaillet, Managing Director, Nutriset®***

<sup>1</sup> <https://www.groupenutriset.fr/en/>



**Origin and sustainability commitment of Nutriset®:** In the 1980s, little attention had been paid to the issue of malnutrition by the private sector. It was primarily governmental organizations and NGOs who used surplus manufactured food to supply to people with malnutrition. Back then, there was no dedicated nutrition available for effectively treating malnutrition, which motivated Michel Lescanne to found Nutriset® as a pioneer in the treatment of malnutrition within the private sector. In 1986, Michel Lescanne founded Nutriset® as a family business in France with the goal of bringing together scientific innovations and industrial excellence with social and environmental responsibility for treatment and prevention of malnutrition among vulnerable populations in LDC/LMIC.

Nutriset® focused on peanut-based food as a solution for malnutrition considering the high-protein and high-energy contents of peanut. With the mission to provide “nutritional autonomy for all”, the company committed itself to not only manufacture and distribute nutritional products to malnourished population groups, but actually build capacity and local sustainable production systems using locally sourced resources to fight malnutrition at the same time support the social and economic development of the local population in vulnerable countries.



**Fig. 1 Nutriset®'s social sustainability commitment** (Source: Thomas Couaillet's webinar slides)

## Product portfolio

Nutriset® launched its first set of products in 1993, F-75 and F-100 therapeutic milks and therapeutic CMV / ReSoMal to treat acute malnutrition. The core of Nutriset®'s portfolio of therapeutic food is a peanut paste developed in mid 1990s by André Briend, a French pediatric nutritionist for use in famine relief<sup>2</sup>. Nutriset® filed for trademark protection of its peanut-based therapeutic food under the brand name Plumpy'Nut® and expanded its nutritional product portfolio over time. In 1996, the company launched Plumpy'Nut® as its first ready-to-use therapeutic food (RUTF), which enabled home-based treatment of children with severe acute malnutrition. It acted as an alternative to supervised, inpatient therapy and transformed the treatment

<sup>2</sup> <https://www.sedgwicklaw.com/plumpynut-when-ip-and-human-rights-collide-05-02-2011/>

of acute malnutrition by enabling the treatment of more patients<sup>3</sup>. In 2006, Nutriset® expanded its Plumpy'Nut® product range to include Plumpy'Sup™, a Ready-to-use Supplementary Food (RUSF) for treatment of moderate acute malnutrition and Plumpy'Doz®, a RUSF for prevention of acute malnutrition.

In 2007, World Health Organization (WHO), the World Food Programme (WFP), the United Nations System Standing Committee on Nutrition (UNSCN) and the United Nations Children's Fund (UNICEF), in a joint statement recognized RUTF as the ideal treatment for severe acute malnutrition<sup>4</sup>. Currently, Nutriset®'s range of therapeutic products include therapeutic milk for treatment of acute malnutrition, Ready to Use Foods (Plumpy® product range) for treatment and prevention of acute and moderate malnutrition in children, Ready to Use Food Supplements (Enov® product range) and nutritional support (Growell®, QBmix®) for prevention of chronic malnutrition, zinc tablets for acute diarrhoea and products for treating dehydration or rehydration.

### Nutriset®'s two-pronged business model

In its early years, Nutriset® engaged in collaborative R&D with the French research institute, IRD, for value creation which resulted in the invention of the formula and method of producing its peanut based paste and the invention was jointly owned by the Nutriset® and the research institute. As of 2021, Nutriset® has about 60 research partnerships worldwide.

Nutriset® adopts a combination of a stewardship (SBM-1) and an inclusive value creation (SBM-2) business models. At the heart of the stewardship business model sits a franchise model, the PlumpyField® Network Model. The inclusive value creation mode is designed around a patent usage agreement model. This combination allows Nutriset® to create, deliver and capture value through its clients (e.g. NGOs, health organizations) and beneficiaries (e.g. malnourished children, pregnant women and mother of newborn).

### PlumpyField® Network

Nutriset® initiated the PlumpyField® network in 2005 to improve access to innovative nutritional products fulfilling international quality standards through production in LMICs, close to the people requiring these products. As of 2021, PlumpyField® network has 12 members across France, Nigeria, Ethiopia, Burkina Faso, Niger, Haiti,

---

<sup>3</sup> Sandige, H., Ndekha, M.J., Briend, A., Ashorn, P. and Manary, M.J. (2004). Home-based treatment of malnourished Malawian children with locally produced or imported ready-to-use food. *Journal of pediatric gastroenterology and nutrition*, 39(2), pp.141-146.

<sup>4</sup>Community-based management of severe acute malnutrition. 2007. A joint statement by World Health Organization, the World Food Programme, the United Nations System Standing Committee on Nutrition and the United Nations Children's Fund. <https://www.unicef.org/media/96981/file/Statement-WHO-WFP-SCN-and-UNICEF-on-Community-Based-Management-of-SAM.pdf>

Guinea, Madagascar, Republic of the Sudan, India (2 sites) and US<sup>5</sup>. Through this model, Nutriset® signed franchise contracts with local private companies in LMIC. As part of the franchise contracts Nutriset® provides access to production know-how and commercialization rights to its patented inventions. The company transfers its industrial and technical know-how about the formula and the process of manufacturing for local production along with licensing its trademark usage rights to help local manufacturers setting up industrial production units for manufacturing and distributing Nutriset® products. Roughly one quarter of all Plumpy'Nut® products worldwide are produced in LMIC.



**Fig. 2 Geographical distribution of PlumpyField® Network** (Source: Nutrivita website<sup>6</sup>)

As a part of the franchise model, Nutriset® enables the local manufacturer to manufacture, pack and sell its nutritional products under Nutriset®'s brand name. To provide a competitive advantage to local manufacturers, Nutriset® denied licenses to developed country manufacturers and blocked IP usage by multinational incumbents from developed countries to prevent price-competition from 'flooding' the LMIC markets with products mass-produced elsewhere<sup>7</sup>. For value creation, Nutriset® procures locally-produced peanuts, thereby contributing to the development of regional/ national agricultural sectors. The assistance provided by Nutriset® to the local stakeholders facilitates skill development in local communities, whereby Nutriset®'s franchising model has created positive impact in many countries. For example, in Hilina, PlumpyField® improved the standard of living of the franchisees' employees who earn 23% more than in their previous jobs.

<sup>5</sup> <http://www.plumpyfield.com/members>

<sup>6</sup> <https://nutrivita.in/about-us/>

<sup>7</sup> <http://news.bbc.co.uk/2/hi/europe/8610427.stm>

Nutriset® delivers value not by selling its products over the counter directly to beneficiaries. Instead, Nutriset® bids tenders for nutritional products called for by international health and nutrition agencies and UN agencies such as UNICEF. Upon successful bid, Nutriset® obtains fund from these organization to manufacture and supply the products to distribution agencies such as NGOs, hospitals and other designated agencies, who then eventually distribute the products further to the beneficiaries, including the children and pregnant women with malnutrition.

### **Controversies over likely patent monopoly and criticisms from humanitarian actors**

Nutriset® favoured patent protection to prevent large manufacturers from mass manufacturing Nutriset® products which can compete with local manufacturers and affect socio-economic development of LMICs. However, this approach was not well received by the humanitarian aid community and other nutritional product industry practitioners because of the monopolistic nature of patents that can possibly create monopoly over a product with high social value. As a result, some of the non-profit organisations and humanitarian actors insisted that overturning the patent would facilitate other manufacturers to produce similar and cheaper peanut-based products produced by global manufacturing sites, which could then be shipped to LMIC for the benefit of millions of children with malnutrition.

The humanitarian actors and private players in food and nutrition industry criticized Nutriset® particularly for two reasons. First, they argued that Nutriset®'s key patent is too broad<sup>8</sup>, as it includes any kind of peanut paste and second, Nutriset's monopoly over its invention, its manufacturing and distribution could impair the quantum of beneficiaries benefiting from this product<sup>9</sup>. In the United States, two of the Nutriset®'s likely competitors including Breedlove Foods and the Mama Cares Foundation filed lawsuits against Nutriset® and sought to invalidate Nutriset®'s patents claiming Nutriset® is stopping them from manufacturing similar, cheaper peanut-based products that can address the proven demand for such therapeutic products. These and other organizations such as Medecins Sans Frontieres (Doctors Without Borders) criticized Nutriset®'s patenting strategy as "aggressive"<sup>7</sup>.

---

<sup>8</sup> <https://www.thenewhumanitarian.org/news/2010/01/12/plumpynut-patent-under-pressure>

<sup>9</sup> <https://msfaccess.org/msf-nutriset-patent-impeding-access-treatment-severe-acute-malnutrition>

## Nutriset®'s response to patent monopoly criticism - patent usage agreement model

According to Nutriset®, not having patent protection would allow other manufacturers to produce similar and cheaper peanut-based products<sup>7</sup> produced by global manufacturing plants, which would then be shipped to developing countries. Nutriset, however, aimed to build local manufacturing sites, thereby, for instance, creating skilled jobs locally. As a response to these criticisms, in 2010, Nutriset® implemented a Patent Usage Agreement model reacting to the patent monopoly criticism of humanitarian actors' and other external stakeholders. Through this model, the company opens (shares) its patents via non-transferable patent license agreements permitting local entrepreneurs in LMIC to build factories of their own, but only in locations where Nutriset® is not present and does not want to build manufacturing capabilities through its franchising model. The patent licensing agreement employs a royalty free licensing model, but comes with the obligation that, in case that beneficiaries of this license are successful in generating turnover using Nutriset®'s IP, they have to contribute 1% of their turnover back to the research (Fig. 4).

***“... You know not to be critic eyes on this patent monopoly, we decided to open the patents in the countries where we decided not to invest and to let entrepreneurs to build factories...”***

***- Managing Director, Nutriset***

### Article 4 : Compensation

4.1. In compensation for the authorization granted under the terms of the present Agreement, the Beneficiary undertakes to:

- recognize Nutriset and the IRD's contribution to in the Nutrition sector through the development of innovative and high-quality nutritional products.
- to pay a "Contribution to the IRD's research works". This contribution is to be 1% of the Net Turnover earned by the Beneficiary during the Contractual Year. It is understood that Nutriset does not expect any financial compensation under the terms of execution of the present Agreement.

4.2. Terms of payment of the Contribution. The Contribution due for the Contractual Year shall be paid directly to the IRD, within a maximum of thirty (30) days from the anniversary date of the present Agreement.

On the anniversary date of the present Agreement, the Beneficiary undertakes to complete an "online declaration form" stating its annual "Contribution to the IRD's research works". This web-based form is available at Nutriset's internet site via the interface "My Space – Usage Agreement by simplified access".

**Fig. 4 Nutriset®'s patent user agreement snapshot**

According to the Nutriset®, such license agreement can '*accelerate the availability of innovative and effective products in the fight against malnutrition and will promote the economic development of African countries*'.

## Nutriset®'s IP strategy as a “means” to achieve sustainability goals

As the patent owner, manufacturer with technical and industrial know-how, and trademark owner of a socially valuable product innovation, the Plumpy'Nut, Nutriset® used its IP (including know-how, patents, and trademarks) as a strategic ‘tool’ to achieve sustainability goals of increasing the availability of quality, nutritional products to vulnerable populations in the global south.

Nutriset® adopts a combination of club (semi-open type 1), common (semi-open type 2) and private (closed) IP models i.e. selective in-bound and out-bound IP sharing models as a core part of its IP strategy (Fig. 5) to build sustainable local production systems for manufacturing and distribution of nutritional products in poorer countries<sup>10</sup> (Tietze, 2021).

## Recent developments and way forward

### Risk of growing competition from similar low-cost products

As innovator, Nutriset® invests in R&D to continually develop its industrial processes, improve packaging, and invent new products. The company invests every year in partnerships for development. As a result, the price of Nutriset®'s products is relatively expensive compared to competitive products, thereby not as price competitive as some of the competitors' offerings, who do not conduct R&D, but rather ‘imitate’ Nutriset®'s products. Nutriset®, however, has a strong reputation for what it has and continues to do, i.e. developmental activities for local communities and regional agroindustry. These reputational benefits provide the company with an advantage over other, cheaper products when bidding for tenders. According to Nutriset®, this could be risky and less sustainable in the long run when the tenderers base their decision in future purely on price advantages. Nutriset® therefore feels the need to defend its business model focusing on maintaining the advantage of its quality products and works towards optimization of its products and adding new products.

### Nutriset®'s IP portfolio and recent IP strategy shift

Nutriset® owns over 30 patents across 13 jurisdictions protecting its inventions (Fig. 6). The company has patents to protect its method of making its nutritional products as well as a machine for packaging granular or powdery products. Nutriset® filed its very first patent in 1997 and continued filing new patents.

---

<sup>10</sup> Tietze, F. 2021. Empowering SMEs to leverage IP for innovation. *WIPO Magazine*, 2: 14-18.

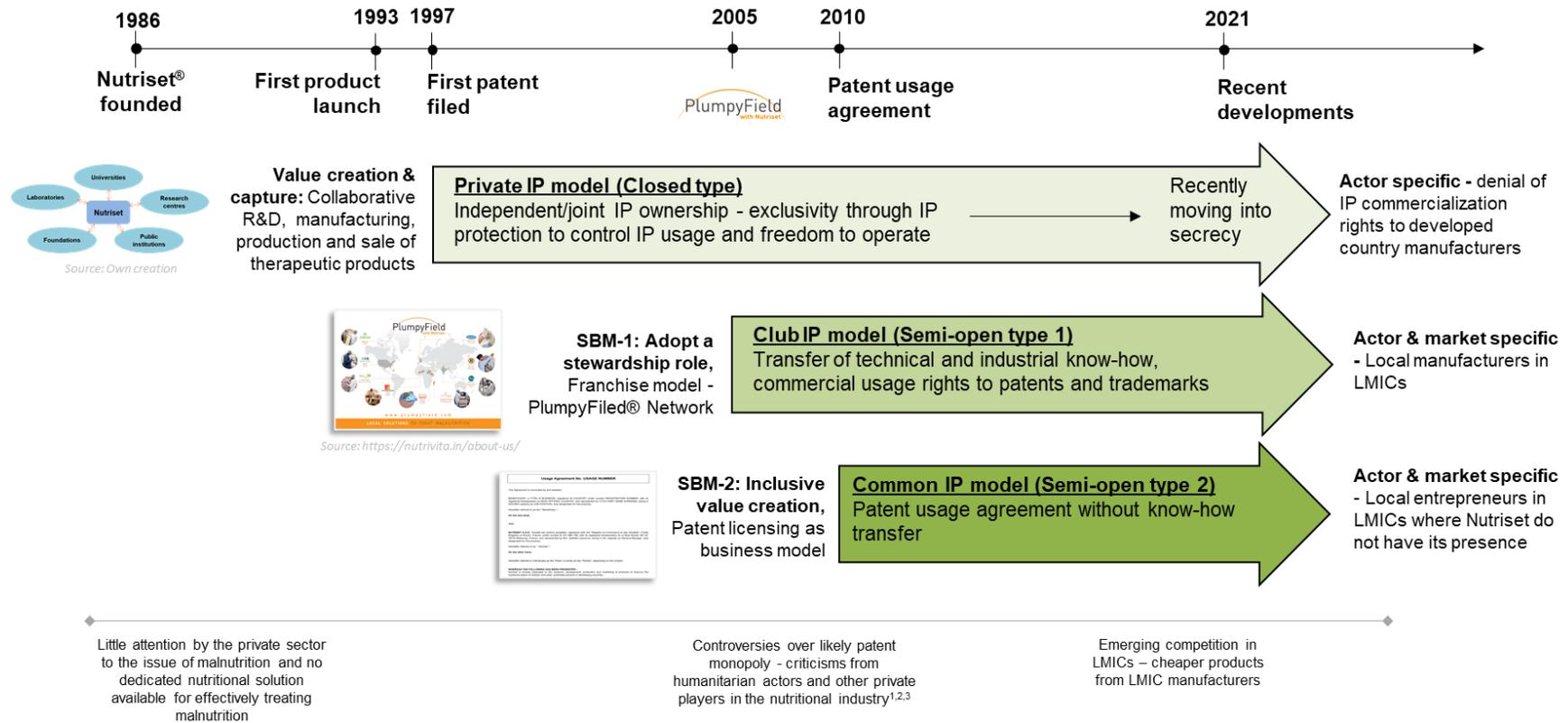
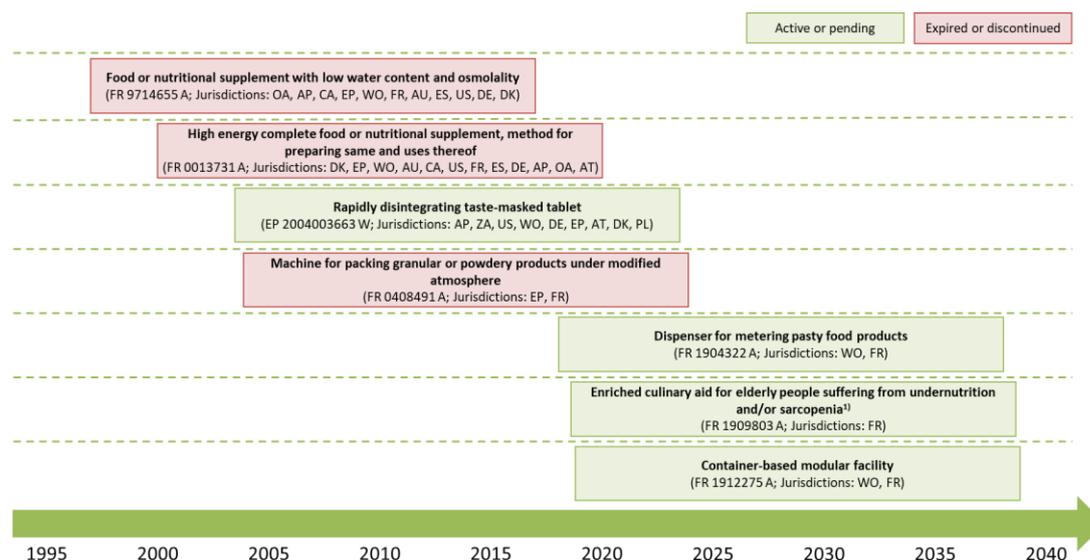


Fig. 5 Nutriset®'s IP strategy (source: own creation)



Source: <https://www.lens.org> (based on extended patent families)

Format legend: patent title (priority patent number; extended patent family jurisdictions)

<sup>1)</sup> Original patent title only available in French: Aide culinaire enrichie destinée à des personnes âgées souffrant de dénutrition et/ou de sarcopénie

**Fig. 6 Nutriset®’s patent portfolio**

In addition to filing patents, Nutriset® also owns trademarks to protect company’s brand name, the name of its flagship network, PlumpyField®, product ranges and individual product names (Fig. 7).

Nutriset® maintains its industrial know-how as a trade secret, which according to its Managing Director offers a longer duration of protection, unlike patents that provide protection only for a limited period of up to 20 years. Such a longer duration of protection is helpful for sustainability when the company tailors its efforts to support local industry development within its sector and hence protect the local players from competition from foreign players through prolonged competitive advantage offered by trade secrecy.



**Fig. 7 Nutriset®’s Trademark portfolio**

Some of the Nutriset®’s patents are about to expire, and some new patents have been filed recently (Fig. 6.). The company continues to develop its IP strategy taking into consideration its environment and ecosystem.

## Funding

This case study is developed as a part of the IPACST research project (<https://ip4sustainability.org/>), financially supported by the Belmont Forum and NORFACE Joint Research Programme on Transformations to Sustainability, which is co-funded by DLR/BMBF FONA-SÖF 01UV1812A and 01UV1812B, GCRF, ESRC (ES/S008322/1), VR 2017-06439, and the European Commission through Horizon 2020.

