



## Nutriset® IP strategy case study – Teaching instructions

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**Note:** Editable PowerPoint slides for introducing the case study are available for download with a Creative Commons (CC BY) license from: [www.ip4sustainability.org/teaching-kit/](http://www.ip4sustainability.org/teaching-kit/)

### Purpose and learning objectives

This teaching case was developed to provoke reflections and discussions about how for-profit actors can leverage intellectual property (IP) for creating sustainable impact, without compromising their bottom line. It does so by providing one example of how a European company has combined different IP models to create sustainability impact, thereby contributing to achieve sustainable development goals (SDGs), particularly no poverty (SDG#1) and zero hunger (SDG#2).

The case study aims to help students develop a deeper understanding of different types of formal and informal IP assets (e.g. patents, trademarks, industrial process know-how) and how these can be used (e.g. licensing, blocking) in combination targeted at different stakeholders (e.g. large competitors, franchisees) to create sustainability impact and thereby to contribute to sustainability transitions.

### Target audiences

The case study is for everyone who seeks to understand how IP assets can be used by the private sector actors to create sustainability impact, support sustainability transitions and achieve SDGs.

It was developed primarily for teaching undergraduate and postgraduate students at higher education institutions but should also be suitable for trainings in the private and public sectors, such as executives and decision makers. The case should be educational for policy makers, particularly those involved in international organisations, possibly also not-for-profit and non-governmental organisations (NGOs) and charities, who might benefit from better understanding how IP can be used for societal benefits. Possibly, the case study can also be used to facilitate discussions with students attending secondary schools/colleges.

While the case study focuses on one example from the humanitarian food sector, its implications and learnings are not limited to that sector.

**Global north and global south technology transfer:** The case company, Nutriset®, is a mission-driven, for-profit, French company that has created positive social impact in global south using IP as a technology transfer tool, hence the case can be used to teach IP for sustainability from the perspectives of both global north and global south settings.

### The case study company

In 1986, Nutriset® was founded as a family business in France. It has been a private-sector pioneer developing and manufacturing innovative nutritional products for the treatment and prevention of malnutrition among vulnerable populations. Nutriset® has built a franchise network of locally-run manufacturing companies in lower- and middle- income countries (LMICs), mostly on the African continent.

So far, Nutriset® is the only company that has won both the prestigious European Inventor Award by the European Patent Office (EPO)<sup>1</sup> and the Patents for Humanity Award by the United States Patent and Trademark Office (USPTO).<sup>2</sup>

Combination of multiple IP asset types: As is the case for many companies, Nutriset® created ownership for different types of IP assets (e.g. patents, trademarks and industrial and production know-how).

Combination of multiple IP models: Not only has Nutriset® combined different IP assets, but also adopted different IP models (e.g. closed/blocking, open/out-licensing) aimed at different stakeholder groups.

### Conceptual/ theoretical foundations

The case study builds on a set of key concepts briefly described below:

#### 1. Innovation

The commercial realisation of product, process or service inventions.

#### 2. IP assets

- a. Formal IP assets are those that have underlying legal systems, particularly patents, trademarks, and copyrights.
- b. Informal IP assets are those that are not particularly protected by legal systems but represent intangible assets of value to its owner, e.g. trade secrets covering manufacturing process know-how.

#### 3. IP models

The case study applies and refers to the following typology for IP models<sup>3</sup>. With IP models we refer to how an entity use its own IP assets, particularly with regards to how openly it shares its IP with other entities.

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<sup>1</sup> [www.nutriset.fr/articles/en/michel-lescanne-receives-the-european-inventor-award-2015](http://www.nutriset.fr/articles/en/michel-lescanne-receives-the-european-inventor-award-2015)

<sup>2</sup> [www.uspto.gov/ip-policy/patent-policy/patents-humanity/2015-award-recipients](http://www.uspto.gov/ip-policy/patent-policy/patents-humanity/2015-award-recipients)

<sup>3</sup> <https://ip4sustainability.files.wordpress.com/2022/05/ipacst-teaching-kit-slide-deck-introip.pdf>

|                                     |   |  |   |  |
|-------------------------------------|---|--|---|--|
| Degree of openness                  |   |  |   |  |
| Type of IP model                    | <b>Private good IP model</b>  | <b>Club good IP model</b>  | <b>Common good IP model</b>   | <b>Public good IP model</b>  |
| IP ownership right concentration    | Ownership is highly concentrated to one or very few actors          | Ownership is relatively highly concentrated on few actors  | Ownership is concentrated or distributed to several / many owners   | No one owns the IP (anymore). IP is in the public domain                 |
| Access to IP <sup>1</sup>           | Owners strictly prevent others from accessing 'their' IP            | Owners allow only members of the club to access 'their' IP. Entry barriers are high for outsider actors.                                     | Owners allow almost anyone to access 'their' IP with or without contributing IP. Entry barriers are relatively low for outsider actors. | Owners allow anyone to access 'their' IP                                 |
| Commercial usage of IP <sup>2</sup> | Owners entirely restrict others from commercial usage of 'their' IP | Owners entitle only members of the club for commercial usage of 'their' IP. Owners prohibit non-members from commercial usage of 'their' IP. | Owners allow almost anyone to use 'their' IP but with some commercial restrictions  | Owners cannot/do not restrict anyone from commercial usage of 'their' IP |
|                                     | <b>Closed IP model</b>  | <b>Semi-open IP model</b>  |   | <b>Fully-open IP model</b>   |

<sup>1</sup>Across all models, owners cannot restrict access to their publicly disclosed IP (eg. in patent documents).

<sup>2</sup>Across all models, owners may not be able to restrict non-commercial under certain exemptions (eg. for research, academic use)

**Fig 1: Typology of IP models**

Nutriset<sup>®</sup> has particularly adopted three IP models (from left to right):

- The private good IP model, also referred to as the “closed” IP model in order to block/prevent large, established incumbent manufacturers in the global food industry from producing similar products cheaper at volume.
- The club IP model, also referred to as semi-open 1, for sharing its formal and informal IP with selected companies, i.e. its franchisees (licensees) in LMICs.

The common IP model, also referred to semi-open 2, in order to share its formal IP with any entrepreneur in developing countries in which Nutriset<sup>®</sup> does not operate or have franchisees, who wishes to manufacture similar products.

Note: Editable PowerPoint slides covering the typology are available for download from [www.ip4sustainability.org/teaching-kit/](http://www.ip4sustainability.org/teaching-kit/)

#### 4. IP strategy

For discussion purposes the concept of an “IP strategy” can be defined as the combination of different IP models, often with individual IP models adopted for specific stakeholder groups in an organisation’s ecosystem.

#### 5. Sustainable impact

Sustainable impact refers to the positive effects of an organisation with regards to three dimensions (social, environmental, economic).

#### Discussion topics and questions

The case study describes Nutriset<sup>®</sup>’s origin, mission and sustainability commitment, value propositions including product ranges, its unique business models and IP model combinations that it has adopted to create social impact. It also covers challenges that the company has faced along its journey and recent developments.

The case is particularly suitable to discuss three topics. Each of these topics is explained below along with the questions and pointers to help instructors facilitating discussions.

However, before discussing any of these topics with students, we suggest getting students started to reflect on the case study with a set of descriptive, introductory questions.

### Topic 1: How has Nutriset® used IP to create social impact?

Nutriset® offers an excellent example of how companies can use their IP assets to help with achieving sustainability impact. Nutriset® particularly has been highly successful in creating social impact with its IP primarily due to its mission-driven, strategic IP thinking. The following questions are suggested for facilitating discussions:

#### a) How does Nutriset®'s business model create sustainability impact?

Note: This question should not focus on the impact of Nutriset®'s products, which are consumed by children and pregnant women to reduce malnutrition, but rather should focus on how Nutriset operates as a company. The discussion should focus around the following issues:

- In contrast to conventional development aid approaches, Nutriset® does not solely manufacture the products in its own factories and supplies those into LMIC.
- Rather, the company nurtures the foundation and growth of local manufacturing businesses based in LMIC. These businesses create jobs locally, use local resource (i.e. by ingredients from local suppliers, such as regional farmers) with positive effect on upscaling of employees and higher salaries.
- Nutriset® has built and operates a franchise network in LMIC called “Plumpyfield®”
- Nutriset® supplies its franchise partners (franchisees) with everything they need to build manufacturing equipment and facilities that work reliably under local conditions in LMIC to operate manufacturing processes efficiently.
- Nutriset® also protects its franchisees from competition by large, established incumbent FMCG companies that could produce similar products at volume and lower costs and ship it into LMIC.

#### b) How does Nutriset®'s IP strategy support the creation of sustainable impact?

**Remember:** An IP strategy can be defined as a combination of using different IP models for different IP assets aimed at different stakeholders in an ecosystem. Hence, we suggest splitting this question into two parts: First, get students to think about the IP assets and then about the actual IP models.

#### What IP assets does Nutriset® own and transfer to its franchisees?

- Formal IP, particularly patents, particularly those covering recipes with ingredient details for its products and trademarks for the Nutriset® product range (e.g. PlumpyNut®), but also for its franchise network and for the actual company.
- Informal IP, most notably know-how and data for how to operate manufacturing processes efficiently (e.g. layout drawing, process parameters, production sequences)

but also knowledge gained from experience on how to build manufacturing equipment that operates reliably under conditions found in LMIC.

### **Which IP models has Nutriset® adopted and at which stakeholders are these aimed?**

- With selective sharing IP as key to Nutriset®'s business model and impact creation, its IP strategy can be described as a combination of mostly three IP models (private, club, common), with two of them (private, club) more strongly contributing to its success than the third one (common).
- Most notably, the club good (semi-open 1) IP model: The company licenses its formal and informal IP incl. patents, trademarks, and manufacturing know-how to its franchisees located mostly in LMIC, so a selected group of companies that are part of the Plumpyfield® network. Out-sharing a bundle of IP enables those companies to efficiently manufacture the Nutriset® products.
- The private good (closed) IP model: Nutriset® has used its patents to protect its franchisees, which are mostly small “fragile” companies in LMIC, from “global north” competition by large, established food companies that could produce similar products at scale and cheaper. This enables Nutriset's® franchisee to grow towards a reasonable stable size.
- The common good (semi-open 2) IP model: After Nutriset® was criticised by using patents to prevent others from producing its product, the company has implemented a patent usage agreement that offers patent licenses for a negligible licensing fee to other entrepreneurs in LMIC, in which Nutriset® has no own operations, respectively franchisees. This agreement is publicly available, while few agreements have actually been signed.

### Topic 2: Which challenges and dilemmas has Nutriset® faced with regard to its IP strategy?

Even though informal IP assets might be of more value to actually enable franchisees to manufacture Nutriset®'s products, the mission-oriented company has deliberately used formal IP assets, particularly trademarks and patents to achieve its goals, which go beyond pure economic gains, but focus on achieving certain SDGs.

The company's patent centric approach has attracted criticism, such as from humanitarian aid sector actors, but also from multi-national companies who claimed having able to produce similar products cheaper at scale but were denied usage of Nutriset®'s patent protected inventions.

The following questions can be discussed:

- Why was the company criticised for its patent-centric IP strategy?*

Discussion points for this question are as follows:

- The first criticism Nutriset® faced was due to the general perception of certain communities like civil societies and humanitarian actors that patents create monopolies and block social sustainable development.

- The above point of view was supported by multi-national companies who can mass produce and sell similar but cheaper nutritional products in African markets accused and sued Nutriset® for patent protecting its socially beneficial inventions and attempted to invalidate Nutriset®'s patents.
- The second challenge Nutriset® is facing arises from the increasing competition in the global south. There are about 20 local companies in Africa that have emerged as competitors creating similar nutritional products.
- The third and also recent challenge is the expiry of key patents.

*b) How has the company responded to the criticism?*

Discussion points for this question are as follows:

- As a response to the criticism, Nutriset® argued that it considers its patent-centric, selective IP sharing approach as a means to facilitate socio-economic development in LMIC by protecting its franchisees against competition from multi-national companies.
- As a response, Nutriset® also implemented the patent usage agreement (common good IP model) that allows any entrepreneur in LMIC to license Nutriset's® patents in countries where Nutriset® do not have plans to invest directly.

*c) What are possible side-effects of misunderstanding of IP / lack of understanding IP?*

Discussion points for this question are as follows:

- Misunderstanding of how patents work, might have adverse effects.
- Criticisms against patents may force a company to stop patent protecting its inventions and possibly use other mechanisms to protect its IP like maintaining it as a trade secret.
- As a result, the public disclosure of the invention, which happens when the patent is published, is blocked. This may prevent follow-on inventions by others who now do not have access to read and learn from the invention, limiting the scale of social impact.
- Those effects are to be avoided as patent systems have been originally implemented to incentivize public disclosure of knowhow that otherwise would be kept secret in exchange for a temporary monopoly.

### Topic 3: Should Nutriset® consider revising its IP strategy? What would be the options?

*a) What are the drivers for Nutriset® to consider revising its IP strategy?*

Discussion points for this question are as follows:

There are three key drivers for Nutriset® to rethink or change its IP strategy. These are as follows:

- Key patents are expiring. As a result, Nutriset will lose the control to block multi-national companies from mass producing cheaper nutritional products that can out-compete Nutriset's® franchisees with potential negative socio-economic impact in LMIC countries.

- Criticism from humanitarian actors may pressure the company to give away its patents possibly reducing its power to control the IP usage for sustainable development.
- Competition from local players may threaten the long-term economic viability of the company's business model. Competitors with imitated products may lack quality standards possibly compromising the quality of the nutritional product.
- Since Nutriset® is carrying out cost-intensive R&D to develop its products, its products are more expensive compared to that of others who manufacture copied products. As a result, Nutriset® may find it difficult to bid on tenders and face the risk of being thrown out of the market if clients in the future focus only on price.

b) *What would be the options for Nutriset® to revise its IP strategy?*

Discussion points for this question are as follows:

- Shift towards a trademark-based IP strategy, i.e. use the brand value (associated quality standards) and know-how established and accumulated over years as key IP strengths to supply quality nutritional products.
- Moving towards secrecy and continuing to selectively share the know-how with the partners relevant for sustainable development.

### Teaching format

The full case study, possibly also the discussion questions should be distributed to the students in advance allowing them sufficient time to read and understand the case study. The case discussion is effective when it is in the format of an interactive in-class discussion both among students and with the instructor. Accordingly, the teaching format for this case study can be divided in two parts.

**Part 1 – Group discussion (suggested 10-20 min):** For in-class discussion, the students can be divided into groups of two to three. Each group is then asked to discuss the questions within the group. This will stimulate discussion among students to agree or disagree with each other's point of view and develop an understanding of strategically thinking about IP for sustainability.

**Part 2 – Instructor-led panel discussion (suggested 20min):** Following the group discussion, the instructor can discuss each question and consolidate the outcomes from different groups. It is suggested that the instructor tailor the discussion towards more of IP-related topics and link it to possible internal and external factors that possibly end with some more speculative discussions of how the company's IP strategy might evolve.