Young people protecting life: low-cost incubators for premature babies

Every year, over 1.5 million premature babies die worldwide due to lack of access to adequate incubators. These essential medical devices are often too expensive for hospitals in developing countries, where they can make the difference between life and death for fragile and vulnerable newborns. It is in this context that a project led by passionate young people was born in Spain, who, with creativity, professionalism, and a spirit of solidarity, are helping to save thousands of lives. Their initiative is a virtuous example of social innovation and, at the same time, a true testament to the protection of human life from its very first breath. The incubators are made in ten Salesian vocational training centres spread across Spain.

Pablo Sánchez and the IncuNest project: faith and innovation

At the heart of this endeavour is Pablo Sánchez Bergasa, a young Spanish engineer who decided to carry on a project started by his colleague Alejandro Escario, who in 2014 had developed a low-cost incubator prototype as his thesis.

Pablo describes himself thus, "I was an unmotivated young man, with a slight addiction to video games." He recounts that he approached that project to help. But shortly after, the original group disbanded; one dedicated himself to his family, another moved to the United States, and he was left alone. "I found myself a bit alone, and I felt unworthy, but I saw it as so necessary that I decided to give what I had then."

For years he worked in his spare time, until in 2019, he founded the NGO **Medical Open World**, within which he developed the project of incubators dedicated to premature babies or those with difficulties.

In February 2025, an unexpected recognition arrived, the news

of the **Princess of Girona Foundation Award**, which was presented to him in July in the presence of the King of Spain, Felipe VI. The Foundation supports the professional and educational development of young talents, and justified the recognition thus, "His generosity in sharing knowledge and his commitment to breaking down barriers inspire those around him and demonstrate that innovation can be at the service of humanity."

That award marked a turning point for Pablo: "It was a loud cry, a call to leave everything and take advantage of this opportunity, because it is a very large megaphone and I must bet everything." He left his job and dedicated himself entirely to the project. It was not a choice dictated by economic calculations. For months he lived only on his savings, worrying his parents. "My parents asked me, 'but what will you live on?' I replied, I will put what is in my hands and leave the rest to God."

The volunteering experience at **Cottolengo del Padre Alegre** was also decisive, where he saw the total trust of the Sisters in Providence. "I saw how the

Sisters dedicated to Providence live and how they lack nothing, and I felt the same call," he recalls. And he adds, "In this project, God has been the constant behind it; He has transformed sadness into joy, defeats into opportunities, and abandonment into commitment."

Pablo does not hide his Catholic faith; indeed, he indicates it as the driving force of his work. "I have decided to put all my effort into saving lives... and I entrust the rest to God."

IncuNest: low cost, open source, global impact

Commercial incubators cost between 30,000 and 35,000 euros and require expensive equipment, complex maintenance, specialised personnel, and, above all, a stable electricity supply, conditions often absent in rural areas or in the poorest countries. Without them, premature babies risk hypothermia, infections, and serious complications.

The IncuNest incubator does not have the sophistication of traditional models, but it guarantees the essentials. It automatically regulates the air and skin temperature of the newborn, controls humidity to protect fragile skin, and includes a phototherapy module to treat jaundice, which is common in premature babies.

It is lightweight (12-13 kg), dismountable, transportable even in a suitcase, and can operate with both 220/110 V current and 12 V car batteries, a decisive advantage where electricity is not stable. The cost of materials? Only 350 euros, about a hundred times less than conventional incubators.

In addition, the technology is open source. The plans and software are accessible to all, promoting replicability and the autonomy of local communities.

Learning and training: the Salesians, a bridge between technology and solidarity

A distinctive feature of the project is the involvement of Salesian vocational training centres. Here, young apprentices learn not only technical skills (mechanics, electronics, design, maintenance) but also values of solidarity and social commitment.

In addition to building incubators, they participate in workshops and seminars that help them grow as responsible citizens, aware that their work has a concrete impact on thousands of families worldwide.

This educational dimension is an integral part of IncuNest's mission: saving lives, training people, transforming communities.

A global impact and a future to scale

To date, over 220 incubators are operational in more than 30 countries, thanks to collaboration with the NGO **Ayuda Contenedores**. They have already saved the lives of more than 4,000 children. Demand far exceeds availability, a sign of an enormous and as yet unmet need.

"The need is very great, but if our effort serves to save one more child, it will be worth it," says Pablo.

The goal now is to industrialise production to expand dissemination and multiply impact. The award received represents an important platform to raise awareness among donors and businesses. "Now we must move forward stronger and further to provide an adequate response to this emergency. We have something that already works and is saving lives; now we must industrialise, go big, and reach more places," he concludes.

This project possesses great moral value, because it affirms the primacy of life; a value of justice, because it allows children in the poorest areas to survive; and a spiritual value, because it views life as a gift from God.

Pablo Sánchez Bergasa left everything to answer this call. His Christian faith is not a marginal detail. It is the engine that sustains him in the decision to put life at the centre, even at the cost of giving up personal security and a stable salary.

It is a project that deserves to be known, supported and expanded.

We indicate the project websites:

Official website: https://incunest.org

Medical Open World Foundation website:

https://www.medicalopenworld.org/proyecto-incunest

Project presentation on the *Princess of Girona Foundation*YouTube channel:

https://www.youtube.com/watch?v=b3d80BgK 2Y&utm