



Laudato Si E-Trading Network: Innovation and Sustainability on a Planet in Peril

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The Spirituality of Economics and Ecology

“We have created a nation of remarkable wealth and productivity, yet one that leaves its impoverished citizens in degrading life conditions and almost completely ignores the suffering of the world’s poorest people. We have created a kind of mass addiction to consumerism, relentless advertising, insidious lobbying, and national politics gutted of serious public deliberation.”
(Jeffrey D. Sachs, The Price of Civilization)

The Laudato Si e-Trading Network (LSe-TN) is in response to Pope Francis’s social encyclical, *Laudato Si*, calling on every person on Earth to help achieve sustainability: “What kind of world do we want to leave to those who come after us, to children who are now growing up?” (LS, no. 160).

The encyclical’s subtitle is “On Care for Our Common Home.” In the words of Pope Francis, “The urgent challenge to protect our common home includes a concern to bring the whole human family together to seek a sustainable and integral development, for we know that things can change” (LS, no. 13). The social encyclical declares that human-induced climate change is a scientific reality and its control is a moral imperative for humanity; otherwise, human evolution cannot continue, and human beings will become extinct and cease to exist.

The founding organizers of the LSe-TN, inspired by the encyclical, intended the network as an activity of the Synodal Church. The encyclical and Pope Francis’ teaching on the Synodal Church are deeply intertwined, emphasizing the importance of listening, dialogue, and collective action. The encyclical calls for an “integral ecology”

that recognizes the interconnectedness of all creation, including human beings and the environment. It highlights the social dimensions of ecological issues, such as poverty, inequality, and climate change. It strongly urges individuals and communities to take action to protect the planet and promote sustainable practices. For its part, the Synodal Church emphasizes the importance of listening to all members of the Church, including the marginalized and those on the peripheries. It promotes dialogue and discernment as essential tools for decision-making and encourages collective action to address the challenges facing the Church and the world.

The encyclical and the Synodal Church are rooted in justice, solidarity, and participation. Both call for a collaborative approach to addressing complex issues like climate change and social inequality. Both likewise recognize the importance of empowering the laity to play an active role in the Church's mission. Thus, the encyclical provides a theological and ethical framework for addressing ecological challenges. At the same time, the Synodal Church offers a practical methodology for implementing these solutions through dialogue, discernment, and collective action. By combining these two elements, the Church can become a powerful force for positive change in the world.

Pope Francis called not only on Catholics but on all people of goodwill, no matter what the race, creed, or nationality, to take up the sustainability challenge: "I urgently appeal . . . for a new dialogue about how we are shaping the future of our planet. We need a conversation which includes everyone, since the environmental challenge we are undergoing, and its human roots, concern and affect us all" (LS, no. 14). He says, "Whether believers or not, we agreed today that the earth is essentially a shared inheritance, whose fruits are meant to benefit everyone" (LS, no. 93). In his speech to the US Joint House of Congress on September 24, 2015, Pope Francis declared: "Now is the time for courageous actions and strategies aimed at implementing a culture of care and an integrated approach to combating poverty, restoring dignity to the excluded, and at the same time protecting nature."

According to Pope Francis, this collaboration is needed because "Everything is connected. Concern for the environment thus needs to be joined to a sincere love for our fellow human beings and an unwavering commitment to resolving the problems of society" (LS, no. 91). He continues: "A global consensus is essential for confronting the deeper problems, which cannot be resolved by unilateral actions on the part of individual countries. Such a consensus could lead, for example, to planning sustainable and diversified agriculture, developing renewable and less polluting forms of energy, encouraging more efficient use of energy, promoting better management of marine and forest resources, and ensuring universal access to drinking water" (LS, no. 164).

The global economy has been shaped by economic forces, not social or ecological ones. It is sometimes described as autistic, rewarding only those who already have the most; it is often enthralled with complex mathematical models that exist only in imaginary worlds.¹ The economy, however, should be at the service of human beings and the

¹ Bill McKibben, *Deep Economy: The Wealth of Communities and the Durable Future* (New York, Times Books, 2007), 100. Economists according to him think of human beings primarily as

natural world, at the service of life. According to *Laudato Si*, creating a future where all people can prosper will require a fundamental rethinking of how the economy should be structured. In light of the economic principles spelled out in Catholic Social Teaching, *Laudato Si* seeks to implement an alternative monetary system based on the economics of solidarity and respect for natural processes while serving the community of life. It supports an economic system where self-organizing communities control essential natural resources. *Laudato Si* forges economic and social development from the bottom of the social pyramid to build a sense of community by connecting intense, often dispersed, pockets of energy and knowledge among the urban and rural poor.

William Easterly wrote in *The White Man's Burden* that aid cannot end poverty—poor people die not only because of the world's indifference but also because of the ineffective efforts of those who care.² The desperate needs of the poor have little weight compared to the vanity of the rich—more money is spent on beauty products than on educating poor children. Only homegrown development based on the dynamism of persons and corporations in innovative markets can help the poor thrive in a global political economy. Thus, the LSe-TN aims to empower the poor to create their future, shape their destiny, and control their lives. It implements a digital marketing and a “green” distribution strategy based on a network of organized communities in the context of a spirituality of liberation and ecology, a spirit of democratic governance, and efficient economic management.

The acquisition and distribution of wealth have always had crucial ethical and moral issues. The power of markets is enormous, but they have no innate moral dimension. Markets concentrate wealth in the hands of a few, pass environmental costs to other taxpayers, and often abuse workers and consumers. Human beings have to decide how to manage them.³ David Korten claims that in highly unequal societies, the very rich are prone to seek affirmation of their worth through extravagant displays of excess. They quickly lose sight of the real sources of human happiness, sacrifice authentic relationships, and deny their responsibility to the larger society—at the expense of their essential humanity. At the other extreme, the desperate are prone to manipulation by political demagogues who offer simplistic analyses and self-serving solutions that, in the end, further deepen their misery. In a culture of poverty, the struggle for survival makes it difficult for people to reflect upon their situation. Governing institutions lose legitimacy. Democracy becomes a charade. Moral standards decline. Civic responsibility gives way to extreme individualism and disregard for the rights and well-being of others.⁴

individuals and not as members of a community and their ideal of a human being is a self-contained want-machine bent on maximizing utility (p. 111).

² McKibben, *Deep Economy*, 7.

³ Joseph E. Stiglitz, *The Price of Inequality* (W. W. Norton & Company, 2013), xiii. Korten says we have to do away with economic systems where economic growth remains the primary value, consumerism defines cultural values and the excesses of corporate behavior are not constrained by fairly enforced rules. See David C. Koren, *Agenda for a New Economy* (Berrett-Koehler Publishers, 2010), 42. We have to face the reality of “an out-of-control and out-of-touch financial system devoted to speculation, inflating financial bubbles, stripping corporate assets, and predatory lending” (p. 43).

⁴ *Yes! Magazine*, August 11, 2012.

Development and prosperity should be measured by “the quality and the realization by each person of the creative potential of their humanity. A high-performing economic system supports the development of this potential, provides every person with an adequate and dignified means of livelihood, maintains the healthy vitality of the planetary ecosystem that is the source of real wealth, and contributes to building community through strengthening the bonds of affection, trust, and mutual accountability.”⁵ Thus, the LSe-TN must keep innovating—enhancing healthy food production, reducing its prices, seeking to please its customers, and monitoring its impact in transforming lives. It must work to build up enduring coalitions among the urban and rural poor, propose concrete policies for effective modes of governance, and imbue its stakeholders with a sense of solidarity, shared purpose, and a renewed sense of confidence in the future to create a path towards a world glowing with harmony and prosperity.

Our forefathers believed that the Earth did not belong to them; they belonged to the Earth. They did not have the concept of absolute ownership of the things of the Earth. They realized that human beings are social beings and that they are also economic, political, and spiritual beings. Economic concerns are only one among other values and needs that make us human. Is there any way at all that this joy, this deep religiosity, this indomitable energy and gritty determination of the Filipino can be harnessed so that they can organize themselves, mobilize on a massive scale, engage the economic and political system, take risks, and decide communally which risks they have to take so that they can attain what they consider of value in the light of their history and culture?

Oikonomia means stewardship. We have failed to be compassionate stewards of the planet. The global political economy that causes garbage dumps all over the world, the slums, the spirals of violence, the terrorist bombings, and the pollution of the environment are glaring proofs that we have not been excellent stewards of the planet. We did not comply with our duty to steward the capacity of the Earth to sustain all life and nourish everyone in it. Modern civilization is inspired by a vision that equates human progress and unbridled economic growth with the growth in the market value of economic output. It subordinates both human and ecological values to that goal. This ideology assumes that Mother Earth’s resources are inexhaustible and the environment can absorb the waste generated by the consumer society. We must move away from the mistaken ideology of infinite material progress towards genuinely sustainable economies.⁶

Western economics made wrong assumptions about human nature, thinking of the human being as *Homo economicus*, a being who makes decisions based on rational self-interest. Western economics consider extreme mathematization and distance from normative concerns as signs of objectivity and rigor, much like the hard sciences. Guided by the invisible hand of the free market, the prevailing economic theory in the world

⁵ Korten, *Agenda for a New Economy*, 301.

⁶ See Tim Jackson, *Prosperity Without Growth: Economics for a Finite Planet* (Routledge, 2011). See also Richard Heinberg, *The End of Growth: Adapting to Our New Economic Reality* (New Society Publishers, 2011); John Michael Greer, *The Wealth of Nature: Economics as if Survival Mattered* (New Society Publishers, 2011).

today sees the pursuit of self-interest to automatically produce the best outcomes for everyone by maximizing value for shareholders who care only about their wealth and the return of their investments. The only goal of business firms is to maximize profit, and the measure of success in national policy is GDP per capita growth. In other words, the ideology behind the global political economy maintains that the self-interest of a rational, autonomous, individual utility-maximizer automatically leads to collective well-being.

The purely rational, greed-motivated person is a functional psychopath—thically unmoored with no moral compass to guide decisions, caring nothing for the welfare of others. The economic doctrine based on self-interest has often led to the overexploitation of natural resources and social problems that make life worse for everyone, not better. The global financial crises that have happened and are bound to happen repeatedly have caused many companies to go bankrupt and some nations to declare bankruptcy. The personal costs in terms of unemployment, poverty, and health have been immense.

The understanding of human beings by free-market economists has not looked closely at how human beings evolved—the best survival strategy for *Homo Sapiens* was to cooperate and to suppress the greed and selfishness that was good for the individual but harmful to the tribe—driving animals toward teammates yielded more meat than hunting alone. The human species survived because our ancestors believed everyone must make personal sacrifices to follow ethical rules and avoid harming others. The LSe-TN believes it is high time for a paradigm shift in economics based on the survival strategies of our ancestors and not relegate our interdependent futures to mindless, values-neutral “market forces.” The purpose of the economy is to provide for the sustaining and flourishing of life. It cannot do this if economists continue to imagine it as an ethics-free and compassion-free sphere.

To accomplish its objectives, the LSe-TN is guided by the values of Solidarity, Integrity, and Creativity to ensure that the economic system works for most people. The LSe-TN also advocates for redistributing financial and natural capital, cutting back on the consumption of material things, and living with green technologies to build a sustainable future. The planet cannot sustain the global political economy as it is being run today, where the environment and economy are always on a collision course. We have to discover new economic models based on limited natural resources. We have to promote eco-efficiency and produce more with less. Filipino inventors must design new products that generate social and natural value for the poor. In other words, the LSe-TN calls for the reorganization and transformation of the global political economy in the light of Catholic Social Teaching and the call of the *Laudato Si* encyclical to care for our common home. This is the only planet we have and the only home we can live in.

The LSe-TN, in promoting its Farm to Table program, the direct trading between the rural and urban poor, believes that the economic system should strengthen the bonds of human solidarity and help those in need to escape the poverty trap. Economic systems are a means, not an end. It holds that the solution to global poverty must lie in establishing a just world order in which the rich nations no longer live off the sweated labor of the poor from the economically undeveloped world. It aims to build a mutual

agreement between people who produce things and those who buy them. Its standards result from equals transparently negotiating in good faith with the intention of both parties to satisfy their basic needs. These negotiations are facilitated through the use of Generative AI, the Internet of Things, blockchain technology, and other cutting-edge discoveries of science.

Catholic Social Doctrine is based on solidarity between human beings - economics, therefore, should foster pro-social behavior. It strongly promotes and defends democracy and freedom and fosters universal human rights based on the dignity of the human person. This doctrine has elaborated several fundamental themes, apart from human dignity and worth: the common good, the solidarity of all human beings, the social destination of all goods of the Earth, social justice, and the religious origin of the right to individual property. Pope John Paul II described in *Centissimus Annus* a form of capitalism shaped within the framework of democracy and the culture of life.⁷ He also championed three fundamental human freedoms as the framework for human development: religious and cultural freedom, political freedom through democracy and the rule of law, and economic freedom through creativity and innovation.

This results in a world where “producers” and “consumers” see each other as people and work together to create a sustainable global economy and society. The LSe-TN would like to measure the living standard by the citizens’ well-being, the communities’ good, and the ecosystem’s flourishing, not by the Gross National Product. Growth will need to rely much more on sustained improvements in human capital, institutions, and governance. The global economy has to be built on a just and sustainable foundation. Without social justice, there will be no world peace.

Pope John Paul II wrote in his encyclical *Centesimus Annus* that “the purpose of a business firm is not simply to make a profit, but is to be found in its very existence as a community of persons who in various ways are endeavoring to satisfy their basic needs, and who form a particular group at the service of the whole of society. Profit is a regulator of the life of a business, but it is not the only one; other human and moral factors must also be considered which, in the long term, are at least equally important for the life of a business.” This is the business principle that the LSe-TN would like to implement among the urban and rural poor. To develop entrepreneurial skills among the urban poor, the Laudato Si Institute for Entrepreneurial Leadership was set up to deliver business training through AI-powered apps, which will promote among the urban poor education in strategy, accounting, and marketing with instruction in morals, character, and religious values through GenAI.

The Laudato Si Institute for Entrepreneurial Leadership aims to teach financial literacy, environmental responsibility, problem-solving, creative thinking, collaboration, and interdependence among the urban poor, especially women entrepreneurs, whom

⁷ Capitalism is meant by Pope John Paul II here as an economic system which recognizes the fundamental and positive role of business, the market, private property and the resulting responsibility for the means of production, as well as free human creativity in the economic sector. It does not mean a system in which freedom in the economic sector is not circumscribed within a strong juridical framework which places it at the service of human freedom in its totality, and which sees it as a particular aspect of that freedom, the core of which is ethical and religious. Cf. *CA*, 42.

the LSe-TN believes are a crucial driving force for economic growth in the country. Even though women own the majority of micro and small enterprises in the Philippines, their businesses tend to be smaller, have fewer employees, and have bleaker growth prospects than their male counterparts. Only 5 percent have access to bank financing, leaving them with fewer resources to invest in their businesses. Although entrepreneurs need money to start their businesses, non-financial assistance, such as mentoring and training, ensures their business succeeds and can repay their loans.

The LSe-TN also seeks to deepen and expand women's leadership in the struggle for land in rural and urban areas and to take care of Mother Earth by using agroecological production practices and enlightened consumption to enhance food security. We must re-engineer how we produce food and adopt a holistic approach to advance our well-being and the health of our ecosystems. It is dangerous for a social enterprise if it does not evolve. The heart and soul of a social enterprise are creativity and innovation. The network would like to come to terms with the implications of the Fourth Industrial Revolution for agriculture.

To enhance organic farm production among farmers and fishermen, the Laudato Si Institute for Sustainable Agri-Ecology was established. The aim is to intensify organic food production while ensuring that the natural resource base on which agriculture depends is sustained and improved for future generations. The poor must equip themselves with new strategies, innovative approaches, and the expertise needed to do their farming and marketing with excellence. The LSe-TN has partnered with other start-ups to use sensors and drones to give farmers more information about their land and planting design. It will use predictive analytics to increase production.

The LSe-TN seeks local investments that will benefit communities over the long term by creating jobs, supporting local businesses, and fostering the local food chain. The network likewise aims to connect investors to the places where they live, creating vital relationships and new sources of capital for small food enterprises so that the 21st Century will become the era of nurture capital, built around principles of carrying capacity, care of the commons, a sense of place and non-violence.⁸ The world is producing more than enough food to feed its entire population. Still, the food does not reach many people because of barriers like monopolized access to the land, the stranglehold over productive resources, and the increasingly concentrated control of the food chain. The network will continue to explore new and multi-disciplinary economic strengthening approaches to help the extremely poor meet essential services and participate in markets, such as improved access to social safety nets, human services, and market development programs.

⁸ "In the 21st century, investing is not only about markets and sectors and asset allocation. In a world that is speeding up and heating up, losing its soil and losing its sense of common purpose, investing is also about reconnecting and healing broken relationships. What could make more sense than taking a small amount of our money, turning in a new direction, and putting it to work near where we live, in things that we understand, starting with food?" says Slow Money founder and former venture capitalist Woody Tasch. Laudato Si is looking to network with local entrepreneurs who can demonstrate that their projects, in addition to financial viability, promote larger social and environmental goals.

The network would also like to differentiate itself by treating the economy as a subsystem of the ecosystem and emphasizing preserving natural capital. Farmers and family farm production play a central role in building food sovereignty. It seeks to foster harmonious coexistence based on mutual solidarity between rural peoples, including peasants, fisher folk, indigenous peoples, and the urban poor in the slums of the cities. It also aims to broaden the e-trading network to include urban dwellers threatened with impoverishment and with demolition and eviction to make way for real estate speculation; consumers among the poor who face ever higher prices for food of an ever-worsening quality that increasingly contains more and more chemicals.

The LSe-TN believes that sustainable development and economic progress must be characterized by a world of social and environmental justice, in which human rights are respected, in which policy and decision-making are transparent and inclusive, in which the economy serves people and respects the planet, an economy for a just and sustainable future towards a world glowing with harmony and freedom. It calls for neither unending “economic growth” nor economic stagnation—but for what might be called a “convergent economy” —a sustainable society where everyone can become all they can be. This convergent economy is also internally sustainable since the despair of the poor and the avarice of the rich are replaced with sharing.

True prosperity occurs when people’s ways of making a living are true to who they are and converge with an evolving cosmos.

The Challenge of a Sustainable Future

“The old economic model has utterly failed us. It has destroyed our communities, our democracy, our economic security, and the planet we live on. The old industrial-age systems - state communism, fascism, free-market capitalism - have all let us down hard, and growing numbers of us understand that going back there isn’t an option.

But we also know that transitioning to some kind of a new economy - and, probably, a new governing model to match - will be a civilization-wrenching process.

We’re having to reverse deep and ancient assumptions about how we allocate goods, labor, money, and power on a rapidly shrinking, endangered, complex, and ever more populated planet.

We are boldly taking the global economy - and all 7 billion souls who depend on it - where no economy has ever gone before.”

(Sara Robinsion, Alternet, May 16, 2012)

The shaman lighted the sacred fire and murmured prayers of gratitude to their tribal gods. Grim-faced warriors with shields and spears, clad in g-strings, and tribal maidens clad in their best finery, descendants of fierce headhunters, surrounded the shaman. They then beat on their brass gongs and danced around the sacred flames, the ground

resonating with the heavy stamp of their bare feet. Beside the fire lay a trussed black pig.

The shaman took a sharpened bamboo stake and pierced the pig's throat. Its squeal of pain drowned the beating of the gongs. The pig was dressed, its entrails divined for auspicious beginnings, and pieces of meat were roasted in the fire—all shared rice wine in coconut shells. Then, dancing amidst the beating of the brass gongs began again in earnest, the warriors vying with each other to show off their muscles and physical prowess to the tribal maidens dancing in a circle around them.

When one of the tribal maidens handed me a red cape as an invitation to dance with them, I placed it on my shoulders, pranced to the beating of the gongs, and danced my heart away, inviting the whole universe to come and dance with me.

It was the celebration of a peace pact between the Kalanguya tribe from the mountains of Nueva Vizcaya and the people of Smokey Mountain in the Parish of the Risen Christ in 2008. Smokey Mountain was a massive garbage dump in the heart of the City of Manila. Headed by then-Mayor Jun Padilla of the town of Sta. Fe, truckloads of tribal peoples came down to the dumpsite and brought agricultural products, hand-woven cloth, fruits from the forests, and ornamental plants to trade directly with the members of the Smokey Mountain cooperative.

The trading activity was the first of the cooperative's many attempts to trade with members of the indigenous peoples. Later, Mangyan tribes from the island of Mindoro and the Dumagats from the mountains of the Sierra Madre also brought their farm products to be sold in Smokey Mountain. The marketing of these products uses technology and networking to harness the power of the free market and address eco-justice issues while asking whether the global political economy is leading the world to death or life. In 2024, Jun Padilla sought to revive the partnership. The group was reorganized into the LSe-TN with its e-commerce platform designed to bring healthy food to the Catholic dioceses in Metro Manila.

The experience of direct trading between subsistence farmers in rural areas and scavengers in a garbage dump led to the question of how to create significant social, economic, and environmental impact sustainably. It allowed millions of Filipinos to escape poverty with the technologies they need to raise their incomes, the proper distribution systems, and business incentives at all levels. How can we restructure agriculture into highly intensive household farming to increase production and to advocate for massive credit, infrastructure, and extension programs for organic farmers? How can we industrialize our organic protocols to increase production and provide more people with food without toxic chemicals and pesticides? We have to move the economy into a more sustainable and just direction, starting with orienting ourselves toward a new goal—not more, but better—better health, better jobs, and a better chance to survive and thrive in the face of global poverty, global conflict, and the climate emergency. The network members hope to face these challenges with renewed hope and the use of cutting-edge technologies in agricultural production and online marketing.

How can Catholic Social Teaching be harnessed to create a moral and ethical economy for this besieged planet?

Human cultural learning gives rise to a form of cumulative cultural evolution that, over centuries, gradually produces increasingly complex tools, technologies, bodies of knowledge and skills, communication systems, and political and economic institutions. Due to this cumulative cultural evolution, urbanization has become so bound up with financial capital and the caprices of the world's financial markets. Urbanization and the digital revolution have created a global ecosystem of interconnected cities and regions. So, we have to look for transformational, game-changing solutions to combat global poverty by building sustainable social enterprises directly linking the urban and rural poor that will leave a legacy of social good for decades to come.

Deciding to confront these issues, groups with the same converging vision established a trading network that would link the rural with the urban poor through the Internet, especially the Basic Ecclesial Communities in Catholic parishes. The context of the conceptual framework for this network where the rural poor can trade directly with the urban poor is the connection between globalization and urbanization, the intertwining of the urban and “non-urban” economies, and resolving the tension between GDP vs. sustainable development by using different bottom lines. The LSe-TN would seek to generate income to support social objectives and, at the same time, improve the strategies and methods social problems are addressed—we cannot solve today's problems with yesterday's solutions. We cannot go on making Catholic Social Teaching the best-kept secret of the Church.

How can we focus the great diversity of uncoordinated, small-scale efforts to address every problem under the sun to solve the problem of global poverty? How can one grow a triple-bottom-line social enterprise with substantial, stable profits while focusing on authentic care and concern for customers, employees, and the planet? We must see the economy as embedded in ecosystems and understand the interaction between economic and social processes to solve the economic crisis. To solve one global problem, we have to see it as connected to others. Any global emergency is linked to other emergencies, so we must consider systems. We must look ahead and be responsible for future generations by engaging in large-scale system change.

The Philippines needs widespread and sustainable economic growth, and the country is showing some progress. Much remains to be done to reduce poverty, however. The most significant contribution to reducing poverty must come from the agricultural sector, where most Filipinos earn their livelihoods. It is a terrible irony that the people who grow the food are often also the ones who go hungry—their crops are too paltry, or prices too low, for their harvest to see them through the year. For subsistence farmers, the harvest is a question of survival or starvation. Poverty among farmers is a complex problem to solve—it would require addressing water and sanitation issues, improving agricultural methods and irrigation systems, promoting economic development initiatives, facilitating access to markets for farm products, running youth leadership development training to inspire the young to engage in farming, ensuring safe childbirth courses and disease prevention, to name just a few of the puzzle pieces needed for impoverished farmers and fisherfolk to begin to overcome their poverty truly.

In the convergent universe, the new paradigm is now the network—Network or die! In the global digital economy, economic activities form an interconnected network powered by technology, Artificial Intelligence, and humanoid robots. So, the partners from the rural and urban sectors decided to harness the power of science and technology to transform slum areas and subsistence farming, believing that providing information and knowledge through technology can fuel innovation and enable individuals and communities to lift themselves out of poverty. When suppliers of farm products understand the needs of their customers through data collected from their mobile phones, they can be more responsive to these needs; when farmers know about more precise methods of analyzing the soil by using drones and sensors, they can use this to their advantage; when information about market trends trickles down to small scale businesses through an e-commerce platform, they can respond rapidly to new opportunities; and when women and men understand the business environment in a global context, they can become more effective entrepreneurs.

The idea is to provide critical information through digital devices and then harness the creativity of the Basic Ecclesial Communities among the urban and rural poor to solve problems in their communities and change their societies innovatively using a mix of entrepreneurship and innovation. The strategy is to combine the best elements of both—creativity, sustainability, cost-effectiveness, and integrity—to redefine the development paradigms of the past. When the poor have a better understanding of their political and economic situation and the demands and constraints of their environment, they make better, more sustainable, and more profitable decisions on their own.

The Laudato Si e-Trading Network

“If we ignore the important ways people cooperate to create wealth, we miss the most valuable source of wealth creation imaginable. Recognizing the true value of relationships, we can build stronger relationships and create and share more incredible wealth.”
(Anna Bernasek, *The Economics of Integrity*)

The LSe-TN is a social mission-driven wealth-creating enterprise with a triple bottom line (People, Planet, Prosperity). It is technology-driven and seeks economic growth, environmental protection, and social inclusion. The network has a social purpose combined with a minimum threshold of financial sustainability. Its principal objective is poverty reduction to improve the quality of life of the urban and rural poor.

The network aims to provide better and more organized agricultural markets to break farmers out of the cycle of poverty and build sustainable communities using their resources to meet their needs, improving their business models, marketing methods, and bottom-line profitability through an e-commerce platform. It creates wealth to cover its operations and invest in other activities related to its social mission; at the same time, it fosters social and economic value that accrues to the poor farmers and fisherfolk as primary stakeholders. Its financial bottom line plays a supportive role to its social bottom line. In producing and providing naturally-grown food products and

selling these goods and services, the poor are engaged as workers, clients, suppliers, and partners in the Laudato Si value-chain ecosystem.

Agricultural output and productivity have to be boosted, especially for small-holder farmers, by giving them access to improved agricultural inputs and advanced technologies and helping them develop their marketing infrastructure to deliver organic rice, fruits, and vegetables to more and more people in the urban areas. This is important to reduce the effects of high and volatile prices on national food security. The increase in production and the sale of naturally-grown products are not the end of the story, as the partners are also very committed to developing the local community. Products are sourced locally, production and distribution systems are put into place to stimulate the local economy, and microfinance loans benefit local farmers, especially women farmers. The women in the slum areas use their distribution networks to sell products through the Laudato Si e-commerce platform.

The former Bishop of the Diocese of Cubao, His Excellency Bishop Honesto Ongtioco, permitted the stakeholders of the LSe-TN to sell naturally-grown food products in the patios of the churches of 46 parishes in the diocese. In this way, the network turns market economies into market communities. The vision of the LSe-TN converges with Priority Agenda # 4 of the Diocese of Cubao: Upholding Human Dignity and Integrity of Creation—“We are witnesses to the neglect of the value and dignity of the human person, especially of the poor and marginalized sectors, whose rights are constantly threatened and attacked. Our Catholic faith emphasizes our responsibility to uphold and respect the basic dignity of our fellow humans. Therefore, we strive to maintain a Catholic community where everyone enjoys basic human dignity and respect and lives without prejudice and discrimination.” The advocacy to help farmers improve their economic status and that of their whole family adds to upholding their basic human dignity and their right to be assured of a sustainable future.

In addition, Priority Agenda # 4 of the Diocese of Cubao is in response to the challenge of Pope Francis to “protect our common home.” It is also our responsibility as Catholics to address environmental problems, primarily if they affect the poor and vulnerable people. The LSe-TN is in response to the challenge of Pope Francis’ encyclical, to Hear the Cry of the Poor and to Hear the Cry of Mother Earth as a Synodal Church, where Basic Ecclesial Communities (BECs) work together to respond to the needs of the poor and the ecosystem.

The members of these BECs have now been organized into the Laudato Si Consumers’ Cooperative. The cooperative will market the products of farmers and fisherfolk from its partners in the provinces to its members among the urban poor in illegal settlements and slum areas. Its motto is “Hear the Cry of the Poor, Hear the Cry of Mother Earth.”

The LSe-TN signed a Memorandum of Understanding with the Department of Agriculture, Region IV-A, in 2014. The DA sought to help enhance organic production among small farmers from five provinces (Cavite, Laguna, Batangas, Rizal, and Quezon) and market these in parishes in the dioceses of Metro Manila in coordination with the National Organic Agricultural Board of the Department of Agriculture. The network has also partnered with the Calabarzon Organic Exchange (CORE), which

provides fresh, naturally-grown produce from the surrounding provinces of Cavite, Laguna, Batangas, Rizal, and Quezon (Calabarzon). Energy costs of transporting the products were minimized, personal exchanges between the farmers and the consumers were increased, and the local economy was cushioned from food shocks when there were financial shocks elsewhere in the world.

Partnerships have recently been forged between the LSe-TN, the Benguet Agri Pinoy Trading Center in La Trinidad Valley, and the Nueva Vizcaya Agricultural Terminal. Region 3 of the DA, with seven provinces and an estimated 10,000 farmers, planned to sign a Memorandum of Agreement with Laudato Si. The Department of Agrarian Reform recently communicated its intention to join the network and is currently mobilizing the Agrarian Reform Beneficiaries' Organizations for this end. These partnerships embrace the industrialization of organic protocols through regenerative agrotechnology and the greening of the supply chain distribution networks to combat the dire effects of climate change. Agriculture is responsible for more than 40% of carbon emissions, so the success of these partnerships will significantly impact the campaign to lessen carbon emissions.

The goal of putting up Sunday Organic Markets in the Catholic parishes in Metro Manila is to provide food without synthetic chemicals and pesticides to as many people as possible and create a fair trade system in which communities exchange surplus production for mutual benefit. Laudato Si has found that only an integrated approach that looks at both demand and supply sides using an e-commerce platform simultaneously can trigger successful agro-value chain development. Post-harvest handling, agro-processing, and value addition should also be considered. Post-harvest losses due to poor storage facilities and lack of transport options are significant at present – with pests and diseases destroying an estimated 15-30% of farmers' hard work and preventing them from selling surplus crops or better feeding themselves and their families.

Laudato Si will market organic products in the Catholic parishes of Metro Manila with small mark-ups through the Laudato Si Consumers' Cooperative because it intends to buy high and sell low once economies of scale have been reached. This is done through bulk purchasing—the combined population of the areas covered is almost one-third of the whole country's population. Laudato Si partners with government entities because development must occur within a framework of protective legislation to protect small stakeholders against price exploitation. Cheap financing, access to markets, extension education, and community organizing among farmers and fisherfolk are other vital inputs that the government has pledged to provide. Laudato Si also advocates for land reform because the land reform law in the Philippines is too verbose, extremely complex, insufficiently radical, with many loopholes, and with an absurdly extended timetable for implementation to make a dent in the empowerment of farmers. Secretary Conrado Estrella III has pledged to plug these loopholes to raise the standard of living of land reform beneficiaries.

The network seeks to fundamentally and permanently transform the context, global in nature, which gives rise to the opportunities and challenges for which its solutions are designed. To achieve this, the business strategies chosen for Laudato Si are:

- To organize the rural and urban poor communities for entrepreneurial activity and leverage their buying power through an expanded customer base and improved market access using technology.
- To enhance the stakeholders' capabilities, skills, and motivation to offer customers a more valuable relationship.
- To establish value-based two-way market linkages with suppliers and consumers who share the same values.
- To deliver cheap and quality goods conveniently through an operationally efficient (green) supply chain distribution system.
- To implement business operation processes more efficiently by utilizing Generative AI and Microfinance Management Systems (MMS) powered by GPT4.

The critical success factors of Laudato Si are the establishment of:

- **Strategic Culture:** The core values to be inculcated are those required to motivate, empower, and align members of poor communities behind the mission. To empower them with organizational skills that can be mobilized for economic activities, the values chosen are *pagpapakatao*, *pakikipagsandiwaan*, and *pagkamakasaysayan* (Integrity, Solidarity, and Creativity). This kind of culture supports creativity, embraces diversity, and promotes personal growth to foster innovation and sustainability.
- **Strategic Competencies:** The skills and knowledge the stakeholders need to become knowledge workers, enhance their ability to innovate and build a learning organization required to support the mission.
- **Strategic Partnerships:** Joint ventures with like-minded suppliers are required to implement the mission and maximize supplier strength to capture the total value of service in the marketplace. The Laudato Si supply strategy must create accurate, repeatable benefits that build supplier loyalty and consistency and gain sustainable supply-based competitive advantage.
- **Strategic Logistics:** The speed and efficiency of supply chain management systems should be critical to operationalizing the mission. Using cutting-edge ERPs, supply strategy should seamlessly integrate with marketing initiatives and management techniques.
- **Strategic Processes:** Operational excellence in cost, quality, and cycle time in using information and communications technology and enterprise management systems is needed to measure and control performance and actualize the mission.

The LSe-TN contributes to poverty alleviation by combining wealth creation and business opportunities by aggregating the buying power of urban and rural poor communities, using cellphones, computers, and laptops to improve logistics, price performance, distribution systems, and economies of scale. Laudato Si combines business innovation along the whole value chain ecosystem with the power of technology to empower the poor and restore people's connection to the value they create while

protecting the environment. It promotes economic development at the local level, with local leadership guided by a sustainable vision of justice and peace for all on this only planet we have.

The Laudato Si e-Commerce Platform

*“Show me how you take care of business
without letting business determine who you are.
When the children are fed but still the voices within and around us
shout that soul’s desires have too high a price,
let us remind each other that it is never about the money.”
(Oriah Mountain Dancer - Invitation to the Dance)*

The source of wealth has always been human ingenuity. A dynamic economic sector powered by technology combined with business acumen is the best hope for the poor to lift themselves out of poverty, unleash the forces of their creativity, initiative, and imagination, and enter the circle of prosperity. The motto of Laudato Si is: Imagine. Innovate. Impact! As an innovation network for entrepreneurship and sustainability, it continues to innovate so that technology solutions can be fused with self-sustaining models for significant, scalable, positive impact on the lives of the poor. To paraphrase an old saying, The keyboard is mightier than the sword.

Since rapidly evolving technology holds the promise of introducing affordable financial tools that can reduce the barriers to market inclusion in a safer, more effective, and transparent way, Laudato Si makes use of Artificial Intelligence and Data Analytics to move the poor from cash-based to electronic financial transactions, such as mobile phones, smart cards, and ATMs. Laudato Si is now beta-testing an e-commerce platform using an open-source platform to do this. It will be ready to be scaled up around the first Quarter of 2025. The platform will network the farmers and fishermen in agricultural cooperatives with the urban poor in the Laudato Si Consumers’ Cooperative.

The Laudato Si e-commerce platform uses a cloud-based e-commerce technology with the usual store management features, e.g., product management, order fulfillment, online payments, coupons, and customer relations apps. It is designed to have customization features that can offer personalized shopping experiences based on past shopping preferences for organic products. The open-source platform has unlimited customization options for excellent usability and manageability. There are plugins and extensions to make room for scalability and free social media extensions. It is designed to be very user-friendly for the urban and rural poor, using it to make their business processes more efficient. The Laudato Si e-commerce platform is integrated with AI-powered apps with production management and forecasting features using predictive analytics. The intersection of GenAI and agriculture promises a sustainable future amid growing global food demands and climate emergencies. Innovative AI solutions can transform farming practices, enhancing efficiency and resilience.

The platform will also use blockchain technology to provide organic farmers with

access to all information on transactions that happen to their products from farm to fork to end exploitative market practices that leave farmers unaware of the actual market prices of their products. Since the organic products marketed by Laudato Si come from large numbers of organic producers, consumers would become aware of the quality and safety of the products they buy when Laudato Si has labeled the food product “organic” or “Halal,” these were strictly grown according to standards set by the government. They would also know from which farm the products came.

The Laudato Si e-commerce platform offers a mobile-friendly shopping cart, seller mobile apps, and many other mobile-based features available. Round-the-clock technical support via live chat, phone, and tutorials, along with the powerful Laudato Si community forum, is also being planned. Digital wallets will be another form of payment option. It will have a built-in analytics system, essential for every e-commerce website. Focusing on analytics is vital to running an e-commerce platform successfully. If you can’t collect relevant data, you cannot learn about customer behavior, which is at the heart of all conversions. Data gathering is even more crucial for Laudato Si because farmers need predictive analytics for plant design. The urban marketing teams need to know beforehand what produce they will sell.

We are now working on an AI-powered app to help farmers make data-driven decisions, maximizing their resources and likely yields. In addition, the app will use machine learning algorithms in loan repayment predictions, input demand forecasting, and pricing optimization. It will also encourage farmers to adopt improved agricultural practices contributing to good soil health. This device helps farmers reduce agricultural risks and generate higher incomes. An AI-powered app is also designed to advise farmers on sustainable farming practices offline and in their language through simple voice calls. The tool enables them to make informed decisions and adopt climate-smart practices. These examples demonstrate the transformative potential of generative AI in agriculture. But it is not just about technology. The LSe-TN is about collaboration and collective action.

Laudato Si aims to conduct its mission by demanding specific values from its stakeholders that comprise its ethical core—Solidarity, Integrity, and Creativity. These values were found during the implementation of the pilot project to maximize integral human development and guide people toward creating a more humane world. These values were rooted in the Trinitarian faith through years of theological reflection and economic praxis. These values, intended to foster an economy of Solidarity, Integrity, and Creativity, are rooted in belief in the triune God. Thus, Laudato Si aims to promote the Economics of Integrity, the Economics of Solidarity, and the Economics of Innovation and Creativity.

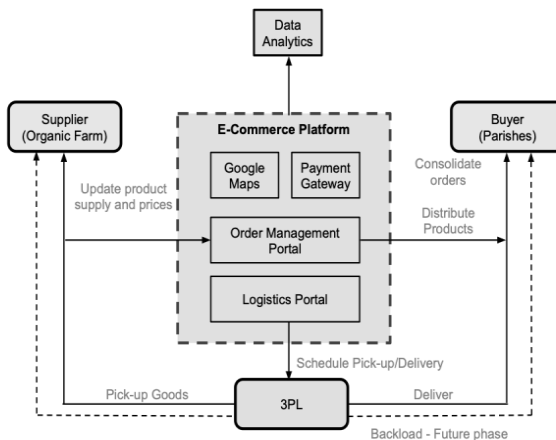
The core values Laudato Si believes in are a central part of its business strategy to help make difficult transitions tolerable. These values are critical for inspiring collective commitment. Running a business ethically and remaining values-based is the right thing to do to become a good company that brings results. We must foster a values-based economic philosophy against the value-neutral economic culture of the free market, immune from any moral, ethical, or religious code in which profit and financial gain become the sole measure of success and in which values and people are ignored.

Current economic systems are changing the world in horrendous ways. The greatest challenge today, the only real question of our time—is to see whether we can transform those economies enough to prevent some damage and help us cope with what we cannot control. Otherwise, Bill McKibben says, the transition will be tragic.⁹

In the next 40 years, we need almost double our food production to feed our fast-growing population in the Philippines. By 2050, nearly 150 million mouths will need to be fed, and each mouth will have more money than ever to spend on more varied and better-quality food. Global agriculture is already one of the most unsustainable sectors in the world. It is by far the most significant driver of poverty, child labor, slavery, loss of biodiversity, water scarcity, climate change, and deforestation. How we double food production without destroying the Earth may be the biggest challenge of our lifetime. And we don't get a second chance to get it right. We hope to survive by following the Laudato Si business model outlined above.

Small farmers not only constitute the majority of the world's poor, but they are also the majority of the world's small and medium enterprises. Through collective action based on the right values, farmers can improve their performance and income. Laudato Si facilitators, equipped with the right approaches and tools, will be trained to do more to support the farmers' business organizations in their entrepreneurial endeavors in light of the core values described above. Laudato Si sees farmers as autonomous entrepreneurs, not as target groups or beneficiaries. In this light, farmers' organizations become business supporters. The central question is how farmers, through the collective action of their organizations and imbued with the values of Integrity, Solidarity, and Creativity, can better access credit and remunerative markets and improve their production and yields. This is crucial for the Laudato Si business model.

VERITAS: SOLUTIONS DIAGRAM



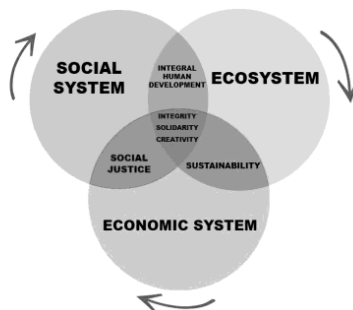
⁹ McKibben, *Deep Economy*, 232.

Laudato Si sees poor people as agents of their integral human development. It focuses on what poor people see as their best strategy for escaping poverty: getting a job or growing a business. It orients its business strategy around creating products and services that improve the lives of the poorest of the working poor. Through the Laudato Si e-commerce platform, the urban poor will be networked with small farmers who produce vegetables, grains, and other crops to feed themselves and sell at a much grander scale with much greater effectiveness at the local market. Rural farmers can avoid costly hybrid seeds, chemical fertilizers, and the false promises of industrial agriculture by joining the Laudato Si marketing network. Farmers' profits will be raised since no middleman will take a cut. And poor people will get access to fresh, cheaper, healthy food. Based on the principles of minimum soil disturbance through no-till organic farming methods, the organic farmers will be taught online how to do crop rotation and use permanent soil cover since conservation agriculture increases the fertility of the farmland. The permanent soil cover from crop residue decomposes into organic fertilizer and enriches the soil. This cover helps retain moisture, which can help them grow a second crop without over-dependence on rain.

The world's economies have become more closely integrated by the global political economy, where international financial markets and transnational corporations control globalization for their benefit. The complex, global, technologically driven economy in which nation-states compete to capture markets and key links in global supply chains forces the poor to adapt to the dictates of the free market. This global political economy is an incredibly complex network of systems, and social entrepreneurs who are forced to act in the face of this uncertainty and complexity want guidance that nobody can give in the face of all the contradictions, uncertainties, and complications that economists are finding out. The core values of Laudato Si are designed to help its stakeholders find a way to live in a volatile, uncertain, complex, and ambiguous context on a highly urbanized and globalized planet. The Laudato Si e-commerce platform aims to promote these core values by embedding them in the trading network process.

Towards a Convergent Economic System

Only the right combination of business models and e-commerce platforms will survive the competition in a global political economy. The business model that underpins the Laudato Si e-commerce platform is summarized by the Venn diagram below:



It depicts the convergence of the ecosystem with the social system and the economic system. Its strategies are based on actions promoting integral human development, social justice, and sustainability. The core values are Solidarity, Integrity, and Creativity. All this is understood in light of the new understanding of the universe ruled by physical laws built upon the principles of quantum mechanics. The paradigm shift now is from things to ideas, from hierarchy to networks, from information technology to interaction technology, and from seeing organizations as machines to viewing them as communities. We have moved to quantum mechanics and relativity from Newtonian physics' mechanistic and rationalistic clockwork universe.

In quantum physics, we know that space is curved, that gravity is the warping of space and time by physical mass, that time and space are not two dimensions but one linked frame of reference, and that time is part of the physical universe. In this world, Newtonian cause-and-effect logic has no place. Systems analysis and the development of chaos and complexity theories have spawned even more complex ideas – non-linear systems do not behave like mechanical objects. These ideas are slowly permeating into economic theories at present. To seek meaning is to answer the questions of purpose in a convergent universe, creating coherence out of chaos and providing a compelling vision of what tomorrow can bring. This is the context of the *Laudato Si* vision for a convergent economic system. Because what is now being born is a convergent economy, *Laudato Si* aims to be values-based, network-connected and innovation-fueled to provide a more optimal environment for new ideas, sustainable growth, and human flourishing.

The continuing argument among economists with contradictory prescriptions for growth is a product of philosophical assumptions about what a human being is and the role of government. No matter how sound the economic data is, this cannot be fully resolved without a proper understanding of what the economy is for. In this business environment, *Laudato Si* has linked the indigenous tribes and impoverished farmers and fishermen with the urban poor in Metro Manila in an integrated pattern of relationships facilitated by information and communication technology. The network, at the same time, is responsive to the needs of the ecosystem and focuses on sustainability as the driver of innovation—*Laudato Si* understands convergent economics as promoting integral human development, social justice, and sustainability.

Laudato Si leverages existing networks to create vibrant new markets that serve bottom-of-the-pyramid consumers and designs trading relationships that reach and sustainably benefit small-scale producers. Ecological economics has become a business imperative in manufacturing products and delivering services, an economy that restores natural and human capital. Intelligent investment in market mechanisms can deliver enhanced profitability and a stronger economy, help solve the climate crisis, and create a better future for the planet.

Laudato Si implements new business models that create economic activity at the bottom of the pyramid, providing people on the margins of the global economy access to products and services that address minimum basic needs. It creates sustainable businesses that directly benefit communities among the urban and rural poor by marshaling “solidarity funds” for needy entrepreneurs and small farmers, developing trans-

regional infrastructure in the country, and promoting education and research for the common good. It actualizes Pope John Paul II's encouragement to the poor in his encyclical *Centesimus Annus* # 34: "to acquire expertise, to enter the circle of exchange, and to develop their skills to make the best use of their capacities and resources." Sustainable economic development presumes circles of trust and mutual respect. *Laudato Si* enlarges these circles of trust among the poor to sow the seeds for an economic system based on ecology and human solidarity.

Laudato Si exploits market opportunities among the desperately poor and provides them with knowledge, skills, and technologies to allow them to help themselves. It starts with helping them understand why they are poor and involve them in the effort to create their wealth. In this context, women are central to economic growth and development. Women need full access to all levels of education, move up to positions of the highest responsibility in the organization, and have access to all available opportunities. Women have to exercise their full potential and become more involved in management, especially in health services, because maternal health and education consistently prove crucial, and managing savings and investment as in the microcredit movement, which is built around responsible women who pay their debts trustworthily.

Laudato Si began by developing an open trading and financial system that was values-based, predictable, and non-discriminatory, making the benefits of new technologies available, especially information and communications technology. The greatest challenge *Laudato Si* encountered in creating a sustainable, socially responsible, and profitable operation among the urban and rural poor was managing the supply chain effectively. In seeking to use information and communications technology, *Laudato Si* was hampered by the lack of technical training and digital skills, the lack of business advisory services, and difficulty in accessing relevant hardware, software, and connectivity, especially access to the Internet. Another difficulty encountered is that organic producers agree upon few standards on what organic or naturally grown means so that they can be certified by the Department of Agriculture as "organic."

Agroecology is a science, but it is also seen as a movement or practice concerned with farming methods based on peasant's knowledge, local inputs, and nature's principles rather than external inputs and technologies that damage nature, such as the green revolution model. But for *Laudato Si*, agroecology is not just about ecological productive principles but also social and political principles. A feudal landholding cannot be considered agroecological even if it is chemical-free; a farm that is controlled only by men without any role and decision-making power for women is not agroecological either, neither is a so-called organic farm, which replaces expensive chemical inputs for expensive organic ones without touching the structure of monoculture.

To work towards sustainable agriculture, *Laudato Si* advocates the halt of farmland expansion in constructing subdivisions, improving crop production, fostering more strategic use of water and nutrients, reducing food waste, and dedicating croplands to direct human food production, especially in degraded areas. Improved use of existing crop varieties, better management, and improved genetics could increase food production to nearly 60 percent. The Department of Agriculture claims that pests destroy, spoil, or eat one-third of the food farmers produce. Eliminating waste in the

path food takes from farm to table could boost food available for consumption by another 50 percent.

We realized early on that if Laudato Si is to contribute significantly to poverty reduction, its target group should be large enough. It must focus on those at the bottom of the pyramid. Laudato Si faces the challenge of ending absolute (\$1.25 per day) poverty among the urban and rural poor. We found out that we could not just help farmers grow more healthy food; we had to develop a market also. We have put up incubator hubs where the poor and millennials can discuss how to scale up their businesses. Laudato Si Organics markets organic products, including soap, herbal oils, and beauty products that do not degrade the ecosystems.

Markets are often controlled by a cartel of a few large producers who manipulate prices to their advantage and the disadvantage of the small farmers, who usually do not possess the ability to transport perishable goods and negotiate a fair price. This makes them easy prey for a trader who picks up the produce at rock-bottom prices. We learned about this the hard way. Laudato Si started with around 20 evangelical pastors in Payatas, the garbage dump in Quezon City, who wanted to implement the vision of justice and peace in God's Kingdom. They pooled their resources, and we could buy 20 sacks of rice to be sold in a small store. The merchants in the area got together, lowered their prices, and our store went bankrupt in two weeks. Without economies of scale, the poor are quickly swallowed up in a predatory system of economic activity. An enormous amount of economic activity occurs outside competitive markets dominated by for-profit, private firms. This informal economy has different rules than the one equating economics to the "market."

After that sad experience, Laudato Si changed its strategy for survival and sustainability by establishing community-supported enterprises collaborating with organic, small-scale post-carbon farmers. It promoted whole-systems agroecology among impoverished farmers: traditional practices that enhance soil productivity and use beneficial trees, plants, animals, and insects to ward off pests rather than relying on chemical fertilizers and pesticides and using vast amounts of water and energy. Laudato Si organized farmers and fishermen into a pool of strategic partners dedicated to the vision of helping establish communities for joint economic activity to assist in poverty reduction and social transformation, as well as for health reasons.

Laudato Si connects the satisfaction of basic human needs to ethical, moral, and spiritual matters to arrive at sustainable consumption levels. In a political-economic system where the everyday lives of more than a third of the nation continue to be subject to overwhelming misery, chaos, and disruption, Laudato Si advocates a reorganization of the economic system and the social system to allow a broader sharing of the gains of economic growth in a sustained and systematic way to preserve the health of ecosystems. Laudato Si is building an app to manage its microfinance projects with Sporos, the Laudato Si Microfinance Management System, for better financial access.

In the United States, the National Institutes of Health reported that four of the six leading causes of death are linked to unhealthy diets. In the Philippines, the people's diets have started to fill up with unhealthy food that is less nutritious and often filled with chemicals, growth hormones, pesticides, antibiotics, and toxic elements, as they

lose the ability to feed their children with locally-produced, naturally-grown food. The biochemists at De La Salle University, who are partners of Laudato Si, showed me statistics on breast cancer among Filipinas. As Dr. Marissa Noel said, they have the highest incidence in Southeast Asia and number nine globally. This was why the WOW Organic Restaurant and Laudato Si Organics were put up. We wanted more people to have better access to healthy food and prevent diseases.

Laudato Si supports livelihood programs and efforts aimed at social transformation while seeking to bridge the digital divide. Laudato Si synthesizes the technological capability of the poor (most of them have cell phones) with market needs. It integrates these two aspects in one activity, as it were, to incarnate spirituality in economic activity and to situate economic activity in a moral and ethical foundation. Laudato Si's primary beneficiaries are the poor in the rural and urban areas. The primary workers are women, traditional breadwinners, and entrepreneurs in poor communities with better credit risks than men. Laudato Si makes essential commodities available at prices lower than the market and empowers them through spiritual formation and information technology to rise above their present situation. The entrepreneurial ethic is promoted through consumer education, upgrading skills for higher remuneration, encouraging them to save, and helping them become all they can be while subscribing to the core Laudato Si values. Savings is widely recognized as one of the best financial inclusion and enterprise development methods. It can help to prepare households for emergencies and take advantage of economic opportunities when they arise.

The Global Political Economy

*“The gross national product counts air pollution and cigarette advertising,
and ambulances to clear the highways of carnage.
It counts special locks for our doors and the jails for people who break them.
It counts the destruction of the redwood
and loss of the natural wonder in chaotic sprawl ...
the gross national product measures everything,
except that which makes life worthwhile.”*
(Robert Kennedy, University of Kansas, March 18, 1968)

The opening decade of the twenty-first century has seen surges in food crises, with hundreds of millions of people chronically food-deprived in an era of rising food prices and widespread speculation. On a global scale, the World Bank reports that over half the global population lives on less than \$2.50 per day, and over 800 million people go hungry daily. According to UNICEF, nearly 8 million human beings died in 2010 because they were too poor to stay alive. Meanwhile, the U.N. reported in 2005 that the wealthiest 500 people in the world earned more than the poorest 416 million. According to the same report, the wealthiest 350 people in the world own assets commensurate to more than 50% of the world's population. Finally, according to a 1998 UN Development Report, the wealthiest 15 people on the planet have assets that exceed the total annual income equal to the poorest 98% of those living on the African

continent. This prompted Pope Francis to declare during a visit to a soup kitchen in Rome on May 21, 2013, that “A savage capitalism has taught the logic of profit at any cost, of giving to get, of exploitation without thinking of people... and we see the results in the crisis we are experiencing.”

Thanks to the Internet, we live in a network economy formed bottom-up by interactions between people in a highly connected marketplace. Some basic rules govern these interactions, but for the most part, the system, like the Internet, emerges freely and unpredictably. We also live now in a growth economy where the chief currency is ideas, and the mechanism for growth is innovation. While traditional economics tells us that productivity comes simply from adding more capital or generating greater efficiency, Convergence Economics, as proposed by Laudato Si, emphasizes ways where broadly defined technologies transform production to promote integral human development, social justice, and sustainability.

The advent of new technologies can create better recipes for economic growth. We live in a growth economy in which the chief currency is ideas, and the mechanism for growth is innovation. While traditional economics tells us that productivity comes simply from adding more capital or generating greater efficiency, convergence economics emphasizes how broadly defined technologies transform the means of production. The advent of new technologies can create better recipes for economic growth. There is an inherent lack of predictability in future operations because they do not add up linearly, and economic structures can evolve into qualitatively different forms. Robotics, nanotechnology, and Artificial Intelligence will profoundly impact economics. Still, the expanding economic network will converge in the end because it is a self-consistently creative, ever-evolving, emergent whole. This convergent economics is inherently beyond predictive control.

The global political economy gives inordinate power to those at the top who shape the political process according to their vested interests, making a few people fabulously wealthy at enormous social and environmental costs to the vast majority. When one interest group holds too much power, it succeeds in getting policies that benefit itself rather than society. When the wealthiest use their political power to benefit excessively the corporations they control, much-needed revenues are diverted into the pockets of a few instead of benefiting society at large.¹⁰ The global political-economic system is a winner-take-all proposition. And so, the world has come to this conclusion: if Walmart were a country, according to a report issued by *Business Insider* (June, 2011), its revenues would exceed the GDP of Norway, the 25th largest economy in the world.¹¹ *Business Insider* claims that Yahoo is bigger than Mongolia, Visa is bigger

¹⁰ Joseph E. Stiglitz, *The Price of Inequality: How Today's Divided Society Endangers Our Future*, W.W. Norton, New York, 2012, p. 83. The more divided a society becomes in terms of wealth, the more reluctant the wealthy are to spend money on common needs, according to him (p. 93). See also his *Freefall: America, Free Markets and the Sinking of the World Economy*, W.W. Norton, New York, 2009.

¹¹ Stiglitz claims that the six heirs of the Wal-Mart empire command wealth of \$69.7 billion, which is equivalent to the wealth of the entire bottom 30% of U.S. society. See *The Price of Inequality*, p. 8. The inequality is the result of political forces as much as economic ones. Market forces help shape the degree of inequality and government policies shape those market forces. He wrote that

than Zimbabwe, Nike is bigger than Paraguay, McDonald's is bigger than Latvia, Amazon.com is bigger than Kenya, Apple is bigger than Ecuador, Ford is bigger than Morocco, Bank of America is bigger than Vietnam, General Electric is bigger than New Zealand, Chevron is bigger than the Czech Republic, and Exxon-Mobil is bigger than Thailand. The world's richest 10% accounted for roughly 85% of the planet's total assets, while the bottom half of the population – more than 3 billion people – own less than 1% of the world's wealth.

In 2009, Forbes magazine reported that the 40 richest Filipinos had a combined wealth of \$22.4 billion. The amount more than doubled to \$47.43 billion the year after that.¹² 32 million Filipinos are earning only P 38 a day (about one US dollar). Corporations believe their only duty is to generate ever-higher returns for shareholders by attracting customers. To do this, they sometimes become ruthless, lay off thousands of workers, pay starvation wages to laborers in developing countries, and pillage the environment.¹³ The market is free, but the people are not. Adam Smith's invisible hand often becomes the invisible fist. The free market has other moral failings, too. It frequently does not protect people from the effects of economic activity, as when toxic material is spilled into the rivers and poisons people living downstream, or from the obesity epidemic and the rise of diabetes due to illogical decisions, irrational impulses, and compulsive choices. Poverty is about power and politics. Political systems have become marketplaces where votes and political influence are traded for economic benefits. For most politicians, private interests and re-election are paramount.

Free market capitalism has helped millions by increasing societal wealth and well-being and alleviating much suffering. It can produce things worked on by thousands of people and yet cost so little.¹⁴ John Maynard Keynes said capitalism is the best system for achieving a civilized economic society. However, it cannot provide full

much of the inequality that exists today is a result of government policy, both because of what it does and does not do.

¹² According to the IBON Political and Economic Briefing, July 12-13, 2012, the net worth of the 40 richest families in the Philippines increased by 40% from 2011 to 2012. Combined net worth in 2012 is US\$34 billion which, for comparison, is equivalent to 27% of the country's gross national income in 2011. In 2012, the number of Filipino billionaires increased from 11 to 15. Interestingly, the corporations of most of these billionaires have also benefited from greater opportunities in government contracts especially those in relation to public-private infrastructure projects. Their corporations have also benefited by capturing water, electricity and oil thus practicing monopoly pricing.

¹³ Robert B. Reich, *Supercapitalism: The Transformation of Business, Democracy and Everyday Life*, Alfred A. Knopf, New York, 2007 p. 176. See also Michel Chossudovsky's *The Globalization of Poverty and the New World Order*, Ibon Books, Quezon City, 2003. Chossudovsky wrote that the restructuring of global financial markets alongside the pillage of national economies has enabled the accumulation of vast amounts of private wealth—a large portion of which has been amassed as a result of strictly speculative transactions (p. 327). This economic order feeds on human misery and the destruction of the environment which in turn has resulted in the globalization of poverty.

¹⁴ William J. Bernstein has written a fascinating history of how trade and globalization evolved, how it contributed to the planet's bounty, stimulated intellectual progress and made human beings both prosperous and vulnerable. See *A Splendid Exchange: How Trade Shaped the World*, Atlantic Monthly Press, New York, 2008.

employment and leads to arbitrary and inequitable distribution of wealth.¹⁵ The prevailing myth is of unlimited economic growth. Still, for reasons of the common good and social justice, there have to be limits to the market because of the limits of human rationality. Interest-based determinism believes that people always act to maximize their material advantages. But people can easily be persuaded to buy things they do not need or would harm their self-interest. The market has always assumed that human beings make rational decisions when purchasing goods, unaware of what neuroscience has discovered—unconscious motives often cause people to act against their self-interest, such as when buying cigarettes and gorging on trans fats.¹⁶ People left to their own devices do not always make choices that redound to their own best interests and often fail to adequately anticipate the consequences of their choices in the long term. The market does not think of the long-term interests of people and ecosystems.¹⁷

The free market is not free. It bestows economic freedom only on those who have access to financial capital.¹⁸ Their money goes to ensure the maintenance of their privileges and competitive edge over their business rivals through contributions to political campaigns and hiring an army of lobbyists to influence lawmakers to craft policies

¹⁵ See Robert B. Reich, *Aftershock: The Next Economy and America's Future*, Alfred E. Knopf, New York, 2010, p. 29. Keynes also thought, according to Reich, that unless these two faults were corrected, capitalism would continue to be highly unstable, vulnerable to economic booms often followed by catastrophic collapses. Keynes concluded that the redistribution of incomes will raise consumption favorable to the growth of capital. Bello also wrote that in the Philippines, the narrowness of the market owing to massive income inequality is the fundamental structural problem, *The Anti-Development State*, p. 9.

¹⁶ See *Free Market Madness: Why Human Nature is at Odds with Economics—and Why it Matters*, by Peter A. Ubel, Harvard Business Press, 2009. Ubel claims that the free-market is not the perfect happiness-maximizer it is vaunted to be because humans are too easily manipulated by other humans, we are too easily seduced by our worst instincts, and we are too often overwhelmed by the many choices we face in the fast-moving market economies. See also *The Irrational Economist: Making Decisions in a Dangerous World*, by Erwann Michel-Kerjan and Paul Slovic, eds., Public Affairs, New York, 2010. The articles confirm the findings of prior research that people often violate the assumptions of economic rationality and are guided mostly in their choices by noneconomic motives. They also discuss important developments in decision making that have happened in economics and other social sciences. Behavioral economists believe that we make irrational economic choices that are contrary to our own best interest. They propose a model which considers people's bias toward the present and the relative bias towards the future.

¹⁷ Nobel Prize winning economist Milton Friedman said that the business of business is to make a profit, not to engage in socially beneficial activities. See "The Social Responsibility of Business is to Increase Profits," *New York Times Magazine*, September 13, 1970. He wrote that "there is one and only one social responsibility of business—to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud." Friedman thinks that there is a strong temptation to rationalize socially benevolent actions as an exercise of "social responsibility." He believes that this is one way for a corporation to generate goodwill as a by-product of expenditures that are entirely justified in its own self-interest. He argues that maximizing profits is a private end achieved through social means because it supports a society based on private property and free markets.

¹⁸ Stiglitz asserts in *The Price of Inequality* that in 2010, as the United States struggled to emerge from a deep recession, the top 1% gained 93% of the additional income gained in the so-called recovery.

favorable to their companies. Although many corporations are waving the green flag of environmentalism, they continue to wreak havoc on the environment. Nearly all large corporate chains are improving the energy efficiency of their lighting, heating, cooling, and refrigeration, improving the fuel efficiency of their vehicles, increasing recycling and composting, purchasing electricity from renewable resources, and taking other measures that save money and reduce waste.¹⁹ All this so far, however, is not making a significant difference in protecting the environment. Many corporations, if they can get away with it, will go on utilizing offshore tax havens to avoid paying taxes, export their toxic waste to poor countries, and maintain factories there that pay starvation wages and where human rights are not respected.²⁰ The free market does not focus on the needs of the poor, the implications of rampant injustice, or the catastrophic problems of ecosystems. The free market is interested in one thing: creating more money.

Free market capitalism has turned global - digital, web-based, and can find and make almost anything anywhere, propelled forward by new communications and transportation technologies like computers, fiber-optic cables, and container vans. This has resulted in widening inequalities of income and wealth, heightened job insecurity, and the growing devastation caused by global warming.²¹ Most nations have become part of an integrated global supply chain, and politics and economics have intertwined into an international political economy. The monopolization of big business is endemic to free market capitalism. It also has a fatal flaw—it is inherently unstable, as shown by the current financial crises gripping the global economy. Unrestricted free enterprise has produced horrible results in the past. David Korten says it is a failed economic system that does not consider the social and environmental costs of monetary profits.²²

¹⁹ See Joel Markower, *Strategies for the Green Economy: Opportunities and Challenges in the New World of Business*, McGraw-Hill, New York, 2009.

²⁰ Douglas Rushkoff has traced the rise of corporations from being convenient legal fictions to being the dominant fact of contemporary life. See *Life Inc.: How the World Became a Corporation and How to Take it Back*, Random House, New York, 2009. The world, according to him, is not only dominated by corporations but also inhabited by people who have internalized corporate values as their own, and the zero-sum logic of corporatist economics. By adopting the ethos of a speculative, abstract economic model as their own, people become disconnected from what matters to them the most, and engage in behavior destructive of their own and everyone else's welfare.

²¹ Reich claims in *Supercapitalism* that this has resulted in the weakening of democracy, whose rule is to determine the rules of the game whose outcomes express the common good and help achieve both profit and social justice. He says that instead of making corporations more socially responsible, who will do whatever is necessary to lure customers and satisfy investors, the better strategy for the common good is to make democracy work better (p. 182) through the creation of rules that balance the interests of consumers and investors with the broader interests of the public (p. 196).

²² *Agenda for a New Economy: From Phantom Wealth to Real Wealth*, Berrett-Koehler, San Francisco, 2009, p. 5. He decries the spiritual and psychological costs of Wall Street culture that “celebrates greed, favors the emotionally and morally challenged with outsized compensation packages, and denies the human capacity for cooperation and sharing” (p. 45). This elitist economic ideology has led to the crippling of the economy, burdened the government with debilitating debts, divided the community into the profligate and the desperate, corrupted political institutions and threatened the destruction of the environment on which our very lives depend (p. 160).

The uneven development of the Philippine economy, where politics and the economy are controlled by a landed aristocracy and where financial resources are concentrated in the urban areas, is one of the reasons for the poverty of its people. Subsistence agriculture cannot absorb the rapidly expanding labor force because there is no significant land reform, and the economy remains feudal. And so, close to 300,000 people migrate to Manila each year. Land prices become exorbitant. And so also, the migrants often end up in one of the 415 squatter colonies in Metro Manila. They make up 44% of the population, citizens with no place to call their own, always living with the sword of demolition hanging above their heads day and night.

Peasant families flock to the metropolis, only to join the swelling ranks of the unemployed. When large numbers of people are concentrated in a little piece of land, often subject to flooding and without essential infrastructure services, congestion and over-crowding are unavoidable. The squatter area then becomes another slum, one of those sprawling urban settlements filled with rancor and despair, hate and disease, dank alleys smelling of urine and excrement, and criminals and drug addicts terrorizing residents with threats of violence or murder.²³

It isn't easy to reconcile conscience with commerce and business ethics with the ecosystem. "It is therefore not enough to help the poor," Pope Francis said on Vatican Radio (May 25, 2013), "we must reform the system at the global level in a way that is consistent with the fundamental human dignity." According to him, the root causes of the current crisis are not only economic and financial but ethical and anthropological, where the idols of power, profit, and money are valued more than the human person. Pope Francis continued: "We must return to the centrality of man, to a more ethical view of business and human relations, without the fear of losing something." We have to move away from the corporate, oligarchic, global dominance of governments, economies, media, and, not least importantly, the military, all driven by the ideologies of consumerism, growth, and "progress" toward some new set of values and structures. We have to keep on trying out concepts that disrupt current structures and systems that have turned much of the world into one vast market. Progress is not a cellphone in every hand—it is when no Filipina is sold as a sex slave, and no more street children are roaming the streets of our cities.

The root cause of social problems in the Philippines is structural—the concentration of wealth at the top because the game is rigged in favor of the elite.²⁴ The benefits

²³ The United Nations broke down the definition of poverty thus: "1. Fundamentally, poverty is a denial of choices and opportunities, a violation of human dignity. 2. It means lack of basic capacity to participate effectively in society. 3. It means not having enough to feed and cloth a family, not having a school or clinic to go to, not having the land on which to grow one's food or a job to earn one's living, not having access to credit. 4. It means insecurity, powerlessness, and exclusion of individuals, households, and communities. 5. It means susceptibility to violence. 6. And it often implies living on marginal or fragile environments, without access to clean water or sanitation."

²⁴ Walden Bello wrote that corruption, cronyism, onerous terms of debt repayment and overpopulation might be significant causes but the structural root of social problems is the massive income inequality in the Philippines. See *The Anti-Development State: The Political Economy of Permanent Crisis in the Philippines*, with Herbert Docena, Marissa de Guzman, and Marylou Malig, Anvil Publishing, Manila, 2009. The increasing inequality and social injustice are the main culprits.

of economic growth are concentrated in the hands of a few hundred families, and they influence how the rules of the economic game are played. In controlling political power, they also shape the actions of the government supposed to implement those rules, which have been tilted in favor of those who monopolize wealth and power.²⁵

Poverty saps people's self-control reserves, so social problems arise in its wake. Lack of money, rampant crime, and a degraded environment often exhaust the poorest of the poor. These factors weaken their self-control, so they think primarily about short-term benefits and immediate gratification—they beget more children, and the cycle begins again. Development is a more effective contraceptive because “when the future is looking up, spending more on the education of fewer children seems a better investment.”²⁶

Colonial history concentrated land ownership in the Philippines in the hands of a small percentage of the population, who accumulated vast wealth. They then run for office in the political arena. Most of these lawmakers and millionaires come from landed families. They then enact laws that protect their families' businesses, landholdings, and political clout. Corporations controlled by the elite make hefty campaign contributions during elections, let loose legions of lobbyists and pay off journalists to push through laws and rules that will help them maintain their privileged positions, and often hire goons to terrorize the voters. They have succeeded in blocking any meaningful land reform. More than 70% of the wealth in the Philippines is owned or controlled by a few hundred powerful families.

Debt service payments comprise 40% of the national budget, and only a pittance is left for social services. More than 40% of the annual budget of the Philippines goes to paying the interest on these loans to creditor countries and institutions. The government has little to spend on education and health care. The borrowed capital is not even touched. And there is very little to show for it. Most have been squirreled away in secret bank accounts abroad. The standing foreign debt was P16.31 trillion by the end of 2006, although the government had paid enormous sums in principal and interest from 1970 onwards.

William Easterly, in his book *The White Man's Burden: Why the West's Efforts to Aid the Rest have Done so Much Ill and So Little Good*,²⁷ documents how the \$ 2.3 trillion the West spent in foreign aid over five decades has not managed to get twelve-cent medicines to children to prevent malaria deaths, or get four-dollar bed nets to poor

²⁵ Dante C. Simbulan wrote about the Philippine ruling elite in *The Modern Principalia: The Historical Evolution of the Philippine Ruling Oligarchy* (Quezon City, The University of the Philippines Press, 2005). Simbulan documents how they evolved in history, how their values shape their behavior, how they exploit the poverty and ignorance of the masses to hold on to political power, and what they do with that power to maintain their privileged positions.

²⁶ Guy Sorman, *Economics Does Not Lie* (Encounter Books, 2009), 169.

²⁷ William Easterly, *The White Man's Burden: Why the West's Efforts to Aid the Rest have Done so Much Ill and So Little Good* (New York: Penguin Books, 2006). Easterly quotes a World Bank Report in 2000 which began with the confession: “Despite the billions of dollars spent on development assistance each year, there is still very little known about the actual impact of projects on the poor.” (p. 194) See the basic principles for helping the poor he enumerates on p. 382.

families, or to get three dollar vaccines to each new mother to prevent five million child deaths. Massive infrastructure development, like dams, irrigation projects, highways, mining operations, and power generation projects, often aided by international agencies, banks, and corporations in developed countries, frequently have devastating consequences on the country's natural resources and have tended to strengthen existing political and economic elites, with little benefit to those who need help the most.

Economics has to connect Mother Earth's cry with the poor's. Human beings are not above the things of the Earth but alongside them. The Market has been divinized because of greed.²⁸ The principle seems to be to strive for maximum profit with the least investment in the shortest possible time. As Francis Bacon said, we must "subjugate nature, press it into delivering its secrets, tie it to our service, and make it our slave." Earth is seen as an enemy to be subjugated and tamed. The Western commercial system would not work if the multinational corporations bore all the production costs, including whatever pollution, sickness, or damage to the ecosystem they caused in the countries they colonized. Since they did not integrate the cost of these into production, they destroyed the land, ruined the health of the people, poisoned streams and rivers, polluted aquifers and wells, crippled communities, and went home with huge profits. They became wealthy through the misfortune of others, a misfortune which they often caused.

The World Development Report of the World Bank said that the HDI score increased from 0.598 in 1990 to 0.699 in 2021 in the Philippines, keeping the country among the group with medium levels of human development. However, the government has not been able to redistribute new wealth created by economic growth. Most of the wealth is concentrated in a few urban areas. It is time to question economic and political systems that do not serve the interests of the more significant number of citizens, systems no longer beneficial to most people. Many of the problems in society are caused by or made worse by governments incapable of exercising authority over their people. Government institutions in the Philippines are mainly ill-equipped to tackle the essential tasks of education, security, and social welfare. On the surface, the political system might be called democratic, but it is a matter of degree of government, not its form. The poor have to be the agents of their liberation – they have to work so that there can be effective political institutions for more excellent stability if democracy is the dominant political system.

In the context of the vast disparities in income between sectors of Philippine society and between nations, *Laudato Si*, as a social enterprise, aims to promote the common good and human values of Solidarity, Integrity, and Creativity by helping the poor take personal responsibility for a shared vision. *Laudato Si* was inspired by the *bayanihan* farming system in the Philippines, where neighbors would converge on one farm to plow it and then move on to the next the day after. This system is also used for planting, harvesting, and even moving houses from one place to another. The *Mondragon Corporacion Cooperativa* also inspired *Laudato Si* in the Basque region in Spain, believed to be the largest and most successful cooperative in history. *Mondragon* expresses its

²⁸ See Harvey Cox, "The Market as God," *The Atlantic Monthly*, March 1999.

philosophy of balancing human, business, and societal needs through its corporate values—cooperation, participation, social commitment, and innovation.

Inspiration was also had from the Economics of Communion of the Focolare. Laudato Si utilizes Catholic Social Teaching as the critical hermeneutic of economic activity.²⁹ I have also been invited to conferences on Business as Mission by Mats Tunehag, where I absorbed many ideas incorporated into the Laudato Si business philosophy. Businesses should be rooted in the community if not owned by the community members.³⁰ The network between the urban and the rural poor aims to restore the relationships of communities which are essential to their well-being and happiness.³¹

Laudato Si aspires to integrate the technological capability of the urban and rural poor (most of them have cell phones now) with their market needs and to advocate for the free sharing of market information and beneficial technology. This synthesis is a means for Laudato Si to help build relationships for justice and the common good through its triple bottom line—People, Planet, Prosperity. Financial profit is easy to measure. Laudato Si uses the Oxford Multidimensional Index of Poverty to measure progress in poverty reduction. Laudato Si is looking for measures for people and the planet to calculate its triple-bottom-line performance. Laudato Si puts purpose and passion above profit and defines business success as a more personally fulfilling and socially responsible life for its network members, the farmers and fishermen in the agricoops and the urban poor in the Laudato Si Consumers' Cooperative.

Laudato Si strengthens the building blocks of local communities and promotes sustainable agriculture so that economic activity can contribute to the well-being of people, communities, and the ecosystem. Laudato Si envisions an economic system that prioritizes creating better lives for everyone. The goal of politics and economics is to serve all of humanity, beginning with the poorest and most vulnerable wherever they may be, even in their mothers' womb, Pope Francis said in a letter to British Prime Minister David Cameron on June 16, 2013. All political and economic efforts and policies must be seen as the means, not the end, with the actual goal being the protection of the human person and well-being of all humanity, continued Pope Francis: "Every economic and political theory or action must set about providing each inhabitant of the planet with the minimum wherewithal to live in dignity and freedom, with the possibility of supporting a family, educating children, praising God and developing one's human potential."

²⁹ There have been several works about the public responsibility of business in organizing economic life. See, for example, *Rethinking the Purpose of Business: Interdisciplinary Essays from the Catholic Social Tradition*, S.A. Cortright and Michael Naughton, eds., University of Notre Dame Press, Indiana, 2002; *Managing as if Faith Mattered: Christian Social Principles in the Modern Organization*, by Helen J. Alford, O.P. and Michael J. Naughton, University of Notre Dame Press, Indiana, 2006.

³⁰ See David Korten, *When Corporations Rule the World* (Berrett-Koehler Publishers, 2015); and *The Post-Corporate World* (Berrett-Koehler Publishers, 2000).

³¹ King Jigme Singye Wangchuck of Bhutan introduced the use of the Gross National Happiness Index as a measure of wealth. See Arthur Brooks, *Gross National Happiness: Why Happiness Matters for America—and How We Can Get More of It*, 2010. A study by Ruut Veenhoven from the Erasmus University of Rotterdam compared the gross national happiness of 95 nations. The finding: the countries in which people claim that they are happy are the richest countries, with competitive economies and well-governed democratic institutions.

In the light of its program “Climate Change and Food Security,” these are the innovations for sustainability in its Climate-Smart Agriculture program that Laudato Si is promoting:

1. **Agroforestry:** Planting trees and bamboo in and around farms reduces soil erosion by providing a natural barrier against strong winds and rainfall. Tree roots also stabilize and nourish soils. Through the Farmer-Managed Natural Regeneration Method, Laudato Si encourages farmers to grow trees as windbreaks or as part of combined forage and livestock production, among other uses. Laudato Si is also engaged in the massive planting of bamboo seedlings in line with the government’s plan to plant 2 million hectares of bamboo. In partnership with Mga Anak ni Inang Daigdig, plans are being drawn to create a bamboo tissue culture laboratory and an incubator hub where innovators can experiment and discuss bamboo-based businesses.
2. **Soil management:** The Department of Agriculture teaches organic farmers that alternating different crops allows soil periods of rest, restores nutrients, and controls pests. Soil amendments, such as biochar, help soils retain moisture near the surface by providing a direct source of water and nutrients to plant roots, even in times of drought. Using drones and sensors will significantly help the stakeholders of Laudato Si engaged in food production manage the soil they are tilling.
3. **Increasing crop diversity:** Monocropping often exposes crops to pests and diseases associated with overcrowding and can increase market dependence on a few varieties. Many species of indigenous fruit and vegetable varieties have vanished in favor of monocultured staples. Laudato Si believes encouraging diversity through agricultural subsidies and informed consumption choices can help reverse this trend and its threat to domestic food security.
4. **Improving food production from existing livestock:** Improved animal husbandry practices can increase milk and meat quantities without increasing herd sizes or causing environmental degradation. Organic farmers are taught to improve the quality of their feed by using grass, sorghum, and brans to produce more milk from fewer animals, reducing pressure on global corn supplies. Again, drones and sensors can help create healthier and faster-growing animals by analyzing humidity, temperature, and other crucial elements in animal husbandry.
5. **Diversifying livestock breeds:** Most commercial farming operations rely on a narrow range of commercial breeds selected for their high productivity and low input needs. Selective breeding, however, has also made these breeds vulnerable to diseases and changing environments. Indigenous livestock are often hardier and produce richer milk.
6. **“Meatless Fridays”:** Avoiding meat at least one day a week will reduce the environmental impacts associated with livestock and increase food availability in domestic and global markets. Current production methods require 7 kilos of grain and 100,000 liters of water for every kilogram of meat. Livestock production accounts for an estimated 18 percent of human-caused greenhouse gas emissions and roughly 23 percent of agricultural water use worldwide.

7. Raincatchments and more innovative irrigation systems: Almost half of commercial and residential irrigation water is wasted due to evaporation, wind, improper design, and overwatering. Installing water sensors or micro-irrigation technology and planning water-efficient gardens or farms using specific crops and locations can significantly reduce water scarcity problems in organic farms.
8. Integrated farming systems: Farming systems designed to be regenerative can improve soil fertility and agricultural productivity by using natural resources sustainably and efficiently. Laudato Si's stakeholders will aggressively promote research and implementation of agrotechnology techniques, such as recycling wastewater or planting groups of plants that utilize the same resources in related ways.
9. Agroecological and organic farming: Organic and agroecological farming methods are designed to build soil quality and harmonize plant and animal health with local ecosystems. Research shows they can increase sustainable yield goals by 50 percent or more with relatively few external inputs. In contrast, genetic engineering occasionally increases output by 10 percent, often with unanticipated impacts on crop physiology and resistance.
10. Supporting small-scale farmers: Small-scale producers are affected more acutely by natural disasters and fluctuating commodity prices, even though they are more likely to be involved in food production. Laudato Si support services will be adjusted to alleviate this deficit. It also seeks increased government funding and support for agricultural research, development, and training programs that can help address hunger, malnutrition, and poverty without being compromised by corporate objectives.

Our humanity thrives when we choose higher goals and long-term objectives, think beyond our lifetimes, and even think of coming generations. Laudato Si takes a long-range view and risks short-term revenue to ensure long-term success and will continue to experiment and learn from mistakes. This kind of vision requires self-discipline and creativity to bring into being new things that did not exist before. It also does not punish failure since transformational initiatives are almost always the result of trial and error. Filipino culture should be transformed to become less averse and more creative and entrepreneurial so Filipinos can achieve their full potential. Their dreams should lead them to believe that a better nation and world are possible.

Laudato Si aims to become a social disruptor, transforming the whole market equilibrium in its areas of operations nationwide. Strategic decisions from the right vision must support business planning and innovation with constant attention to the fundamentals to achieve this. In encouraging creativity, Laudato Si has learned not to try to do too much too soon with too few resources. Also, we should not overestimate the ease with which the e-trading network's objectives can be achieved and underestimate the resources (time, people, money) required to achieve the goal of social, economic, and environmental transformation.

Once a product has been chosen to be marketed or produced, Laudato Si, through its e-commerce platform, gets it to market fast, allocates more resources, rallies everyone behind the marketing strategy, eliminates all potential speed bumps, and gets

everyone on the required timeline. Then, the work practices, process flow, and structure of Laudato Si to execute strategic goals effectively and efficiently are aligned in the light of its vision of what it aspires for. This vision helps create processes that deepen meaning, a spirit that makes people care about making Laudato Si's vision a reality. The vision is reinforced constantly and creatively—the stakeholders must continually look for compelling metaphors and images to describe the vision actively. Every leader must know the importance of speaking so that people can see and feel the future and see and feel themselves thriving in it.

The Laudato Si vision requires systemic change in the institutions that shape markets. Helping farmers produce more food without providing serious support (such as tools for measuring maturity before harvest, tools and containers for post-harvest activities, sorting and grading, cost-effective methods for storage or processing of surplus, access to distant markets, market information regarding prices and consumer demand, and other critical factors) will most likely lead to even more post-harvest losses. Laudato Si aims to figure out how to assist farmers, traders, and marketers with these kinds of value chain supports so that producing more organic food will lead to increased incomes, and there will be more incentive for farmers to produce more organic food which will lower prices, which will enable more people to eat healthy food. The Bureau of Plant Industry of the Department of Agriculture recently donated a refurbished 20-ft container van with LED lights and an aquaponics system so that the people in Smokey Mountain can produce high-value crops in confined spaces in blighted areas. We hope to replicate this project with stacked container vans in slum areas in the urban centers.

Financial technology is needed to help market-based entrepreneurial solutions achieve their social and market potential and meet the needs of millions of Filipinos effectively, equitably, and sustainably. Vast new markets must be created, financed, and regulated nationwide. This requires intense creativity and innovation, so Laudato Si values and promotes imagination, trust, and happiness among the members more than traditional economic measures like efficiency, budgets, technology, or return on investment—social capital over financial capital. Laudato Si aims to promote a creative economy where managers and creatives collaborate to foster innovation and economic value.

The Laudato Si e-TN provides economic incentives that favor recovery and recycling rather than extraction and exploitation of resources through creative economic enterprises that will spring from the people's imagination, innovation, discipline, hard work, collaboration, and intelligence. Laudato Si also incorporates ecological costs on things produced and reminds stakeholders constantly to be mindful of the needs of future generations. Laudato Si asks the poor directly about what they consider 'impact' and 'progress' instead of developing top-down indicators and measurements.

Poverty is caused by the trampling of human rights and lack of access to social, political, and economic power and resources, together with the inability to make choices about food, health, and education. Sustainable product innovations must safeguard sustainable development as a right and a guarantee for fairness. An economics of creativity understands and implements strategies of development low on carbon

emissions in the light of eco-justice and one that favors the poor. We have to leave behind paradigms of unsustainable development based on fossil fuels and the belief that the human being is the center of the universe.

The Laudato Si e-TN joins the call for wealthy nations to reduce their carbon emissions drastically to maintain global warming below 2 degrees and reduce emissions by 25-40% by 2020 based on 1990 levels. This calls for more significant innovation and creativity. Adopting low-carbon emission strategies by developed countries should also provide the necessary technology transfer and financial aid to developing nations moving towards ecological economics. These global efforts should be based on the human right to development and the reduction and eradication of poverty. The processes and decisions must include the full participation of the poor, who are most vulnerable to the effects of climate change, in a clear, participatory, and transparent manner. International development goals will succeed only if every human has the right and the power to live with dignity.

The signing of the Sustainable Development Goals was a historic commitment by the international community to overcome poverty and injustice. If the SDGs do not fall short of people's expectations again, they must address the complexity of global politics and economics and clearly understand human dignity. An economics of creativity must develop a new framework for development that reflects the interconnect-edness of global processes and the divergencies of worldviews.

An Economics of Creativity fosters the production and marketing of goods resilient to climate change. It favors the poor with reduced carbon emissions in an integral, ecological economics that is not fragmented and isolated from natural processes. The LSe-TN is helping do this by introducing climate-smart, technology-driven agri-ecological methods and streamlining the marketing system to cut carbon emissions among the urban and rural poor and the Indigenous peoples, moving towards a vision of development that is inclusive, just, and sustainable. Following the UN's Sustainable Development Goals, Laudato Si sees sustainability according to the social, economic, and ecological dimensions. The economy of convergence must become an Economy of Living Systems.