Preprint version of the paper: García-García, A. (2022). The limits to growth of buen vivir socialism: Ecuador's alternative development model from 2007 to 2017. *History of Economic Thought and Policy*, (1), 25-59. 10.3280/SPE2022-001003

This is a preprint version of the paper published in the journal *History of Economic Thought and Policy*. The text precedes the peer review process and the editing and typesetting of the paper by the journal for publication.

How to cite the paper:

García-García, A. (2022). The limits to growth of buen vivir socialism: Ecuador's alternative development model from 2007 to 2017. *History of Economic Thought and Policy*, (1), 25-59. 10.3280/SPE2022-001003

The limits to growth of *buen vivir* socialism: Ecuador's alternative development model from 2007 to 2017

Aurelio García-García*

Abstract

In 2006, the political coalition Alianza PAÍS promoted a "Citizen's Revolution" in Ecuador that would put an end to neoliberal policies and lead the country to "buen vivir". However, the coalition's arrival to the government and the negotiations of the 2008 Constitution generated fractures and splits within the party. The *buen vivir* was divided into three trends: Indianist, environmentalist and socialist. The socialist trend became the state representative, although it had huge controversies with the other two trends because it opted for a new post-neoliberal development model, while the indianists and ecologists rejected the continuity of the developmentalist models. This article presents the main characteristics of the three trends of *buen vivir*. In addition, based on the work *The Limits to Growth* and through the analysis of socio-economic and environmental indicators, it is shown how the socialist model of *buen vivir* (2007-2017) was an unsustainable model in the medium and long term.

Keywords: buen vivir, good living, socialism, development, Rafael Correa.

JEL classification: E000, O110, O130, P200, P280.

^{*} Aurelio García-García is a researcher at the University of Granada (Spain). Correspondence may be addressed to: aureliogg@ugr.es. ORCID: 0000-0002-4279-2873

I wish to thank Fernando García-Quero, professor and researcher at the University of Granada (Spain), and Antonio Malo Larrea, professor and researcher at the National University of Education (Ecuador), for all the comments and advice they gave me for the preparation of this work. I also want to thank Daniela Abril Gutiérrez Villarreal for her writing and style advice.

I. Introduction.

In 1972 *The Limits to Growth* report was published, a work headed by different intellectuals from the Massachusetts Institute of Technology (MIT) on the "predicament of mankind".

Through systems dynamics, this work analyzed how population growth, food production, industrialization, resource depletion and pollution affected the very survival of the human species (Meadows et al. 1972). Their results were truly worrying, although they showed the way to avoid the collapse of human societies in the short and medium term.

On the fiftieth anniversary of the publication of this report, its results and analyses continue to enjoy unquestionable validity and soundness. However, efforts to avoid the predicted collapse have been insufficient: the world population has grown by approximately 114% (Worldometer 2022), world production has increased by 2,124.91% (World Bank 2022), some mineral resources essential to sustain the current economic system are at critical levels and others are close to reaching their extraction peaks (Herrero 2020), and pollution has led to a climate crisis of planetary dimensions (Almond et al. 2020; Global Footprint Network 2022; Wackernagel and Beyers 2019; .

In Ecuador, at the end of 2006, elections were held that gave victory to the candidate of the Alianza PAÍS movement (MAP), the socialist Rafael Correa. MAP was a political coalition composed of more than thirty parties and social movements, fundamentally connected by the rejection of neoliberalism. Through its Government Plan, this coalition sought to promote a "Citizen's Revolution" that would dissolve the Washington Consensus, along with its values and neoliberal policies, in favor of the achievement of *buen vivir* (Alianza PAÍS 2006; SENPLADES 2007).

During the 2006 electoral process and the subsequent constituent process from 2007 to 2008, the *buen vivir* and *sumak kawsay* represented the symbol around which to build a new post-neoliberal society. However, the unity of Alianza PAÍS and the Citizen Revolution fractured during the National Constituent Assembly. The first recognizable fissure occurred when the environmentalist intellectual Alberto Acosta resigned as president of the Assembly in 2008. This resounding resignation was followed by the progressive departure of different political parties from the Alianza PAÍS coalition. This led to strong and constant criticism and tensions between the political formation and different movements such as the indigenous, environmental and feminist movements. Thus, the Citizen Revolution began to be a disputed term (Wolff 2018) and *sumak kawsay/buen vivir* as well (Vanhulst et al. 2020).

Buen vivir became divided into three trends: indianist sumak kawsay, ecological buen vivir and socilist buen vivir or socialist sumak kawsay, which became the state representative. For this reason, some authors call it statist buen vivir (Vanhulst et al. 2020). However, many authors consider that the socialist buen vivir cannot be considered part of the buen vivir, but a form of symbolic appropriation for political purposes (Lyall et al. 2018; Pereira da Silva 2020).

In this paper, we will first analyze what are the most representative characteristics of each of the three primary trends of *buen vivir*, paying special attention to the socialist or statist trend. Subsequently, based on the categories used by Meadows et al. (1972) for the analysis of the limits to growth, different economic and environmental indicators will be analyzed to determine whether, during the socialist period of *buen vivir* (2007-2017), Ecuador advanced towards a sustainable model or whether, on the contrary, it deepened the path of unsustainable unlimited growth.

II. Methodology.

This paper is divided into two clear blocks: a theoretical one that presents the different trends of *buen vivir* and another oriented to data analysis during the period in which the "statist" trend of *buen vivir* governed Ecuador (2007-2017)¹.

To establish the main characteristics of the indianist *sumak kawsay* and the ecological *buen vivir*, an extensive bibliographical review was carried out for the period 2000-2022. A recursive bibliography technique was applied and the results were filtered by means of cross-referencing technique. The most relevant works on the two trends belong to those who are considered their main intellectual representatives. In the case of the indianist *sumak kawsay*, we find the following names: Ariruma Kowii, Atawallpa Oviedo Freire, Blanca Chancosa, Carlos Viteri Gualinga, David Choquehuanca Céspedes, Fernando Huanacuni Mamani, Floresmilo Simbaña, Grimaldo Rengifo, Javier Medina, Lourdes Tibán, Luis Macas, Luis Maldonado, Mario Torrez Eguino, Mónica Chuji, Nina Pacari, Pablo Dávalos, Simon Yampara Huarachi and Xabier Albó. In addition, organizations such as the Confederation of Indigenous Nationalities of Ecuador (Confederación de Nacionalidades Indígenas del Ecuador) (CONAIE) and the Amazanga Institute of the Organización de Pueblos Indígenas de Pastaza en Ecuador (Instituto Amazanga de la Organización de Pueblos Indígenas de Pastaza en Ecuador) (OPIP) should be added to this list.

In the case of the ecological *buen vivir*, the contributions of the following authors stand out: Alberto Acosta, Aníbal Quijano, Dania Quirola, Eduardo Gudynas, Elisa Vega, Esperanza Martínez, Fernando Vega, Gustavo Esteva, Jaime Patricio Carpio Benalcázar, Koldo Unceta Satrústegui, Magdalena León Trujillo and Pablo Xavier Ortiz Tirado. In addition, the contributions of the Latin American Center for Social Ecology (Centro Latinoamericano de Ecología Social) (CLAES) directed by Eduardo Gudynas and the organization Ecological Action (Acción Ecológica) chaired by Esperanza Martinez should be included.

In the case of the statist trend of *buen vivir*, the same methods have been used to determine its main representatives. Nonetheless, the intellectual production around this trend is scarce and relatively outdated. Table 1 shows all the journal articles, books, book

¹ In 2007 began the government of Rafael Correa and the intellectuals of the socialism of *buen vivir* and in 2017 began the government of Lenín Moreno, who reneged on *buen vivir* and opted to lead the country through a socio-liberal political project.

chapters and reports by the most relevant and cited authors on *buen vivir* socialism in the Dialnet, Google Scholar², ProQuest, Scielo, Scopus and Web of Science databases between 2000 and 2022. The result was 65 reference works.

Table 1. Works on the *buen vivir* socialism in scientific databases (2000-2022).

Author	Dialnet	Google Scholar	ProQuest	Scielo	Scopus	Web of Science	Total works
Borón, Atilio A.	0	0	0	0	0	0	0
Cárdenas Aguilar, Félix	1	3	0	0	0	0	3
Coraggio, José Luis	0	0	0	0	0	0	0
de Sousa Santos, Boaventura	0	1	0	0	0	0	1
Falconí Benítez, Fander	3	2	0	1	0	0	3
Féliz, Mariano	0	4	0	0	0	0	4
García-Linera, Álvaro	1	8	2	0	0	0	8
Harnecker, Marta	0	2	0	0	0	0	2
Houtart, François	4	3	0	1	1	0	5
Larrea Maldonado, Ana María	1	8	0	0	1	1	8
Ministerio de Planificación del Desarrollo	0	3	0	0	0	0	3
Prada Alcoreza, Raúl	1	6	0	0	0	0	6
Ramírez Gallegos, René	8	16	1	0	2	2	16
Secretaría Nacional de Planificación y Desarrollo	0	5	0	0	0	0	5

Source: own elaboration.

 $^{^2}$ Using the names of the most relevant and cited authors on *buen vivir* socialism as keywords, only the first fifty entries in Google Scholar have been analyzed. This is because Google Scholar has few options for limiting searches and its search algorithm includes a huge number of papers that only mention these authors in the body of their texts.

Finally, the names of other important *sumak kawsay/buen vivir* researchers who are not classified in one of these three categories should be highlighted: Adrián E. Beling, Ana Patricia Cubillo-Guevara, Antonio Luis Hidalgo-Capitán, Catherine Walsh, Julien Vanhulst, Matthieu Le Quang, Philipp Altmann and Rickard Lalander.

On the other hand, to determine the data analyzed in this work, the categories established by Meadows et al. (1972) were used as a starting point: population, food production, industrialization, resource depletion and pollution. Using the databases of the Central Bank of Ecuador, World Bank, Global Footprint Network and Food and Agriculture Organization of the United Nations, the evolution from 2007 to 2017 in Ecuador of the trade balance, the value and the share of traditional and non-traditional sectors in the non-oil trade balance are studied, the Gross Domestic Product (GDP) per capita, the share of oil and mining in the GDP, the added value of agriculture and industry, the prevalence of undernourishment and malnutrition, the total population, the fertility rate per woman, the ecological footprint and the biocapacity through the number of lands and the global hectares per person.

III. The "buenos vivires": alternatives to development and alternative development.

The Alianza PAÍS Movement was composed of more than thirty parties and social movements. These parties and social movements were fundamentally connected by the rejection of neoliberalism, but the alternative model of society to the neoliberal project was not fully defined. The very claim of *buen vivir* was confusing, as it was not established exactly what should be understood by *buen vivir*. From its beginnings to present times, there have been numerous references to *buen vivir* as an utopia under construction (Acosta 2010; Ávila Santamaría 2019). There is evidence of the existence of *sumak kawsay* in past and present indigenous societies (Inuca Lechón 2017), but *sumak kawsay/buen vivir* as a socio-economic trend with paradigms and doctrines is a political and academic project of the twenty-first century.

During the National Constituent Assembly (2007-2008) these differences were highlighted. The socialist representatives confronted the indigenous, indianist and ecologist representatives. One of the main reasons was the socialists' defense of an alternative development project for Ecuador, while the others supported an alternative project to development.

The positions on *sumak kawsay/buen vivir* linked to indigenous and indianist representatives would later be grouped under the academic denomination of indianist *sumak kawsay*. This trend stood out mainly for the claim of plurinationality for Ecuador and the construction of an intercultural society (Altmann 2019).

However, the most distinctive feature of the indianist *sumak kawsay* is its holistic conception of the cosmos (*pura*), meaning that the cosmos is analyzed as an interconnected, interrelated and dependent whole (Macas 2010). Human beings are just

another part of nature, just like animals, plants, the sun, rocks, water... Human beings must be in balance and harmony with nature. Therefore, the indianist *sumak kawsay* holds that one can only obtain from nature what one needs to live (Viteri Gualinga 2003). Austerity and sufficiency are two principles of this socio-economic model. Growth and capital accumulation are rejected, since they generate imbalances, inequalities and conflicts. The production surpluses themselves do not have an individual appropriation, but have a communal use or are "burned", "destroyed" or "consumed" in the institution of the party (Maldonado 2010a).

This economic system directly affects the conception of wealth, working hours and labor relations, and globalization processes. The indianist *sumak kawsay* does not employ a monetary conception of poverty. Poverty is conceived as scarcity of agricultural products and food insecurity (*mútsui*) (Viteri Gualinga 2003) and/or as loneliness and isolation (*wakcha*) (Maldonado 2010b).

Work is understood as a necessary activity for survival and for living well, not for accumulation or "better living". Thus, work represents a way of relating to the community and of learning and growing (Medina 2011) and/or an activity of "contemplation, meditation and celebration" (Medina 2011: 55).

Finally, although globalization may present positive aspects such as increased knowledge or the creation of intercultural relations, it has caused enormous ecological impacts and has favored acculturation and the loss of traditions and practices of indigenous peoples. For this reason, globalization is questioned or directly rejected (Oviedo Freire 2016).

On the other hand, during the Ecuadorian National Constituent Assembly, those figures who were linked to post-extractivist and decolonial environmentalist approaches also stood out. These personalities, with great academic weight and also in social movements, would become part of the so-called ecological *buen vivir*.

The discourse of the representatives of the ecological *buen vivir* is especially focused on the relationship between human beings and nature. It is a trend with strong influences from deep ecology and advocates for biocentrism.

Nature ceases to be an object to become a subject, which has its own intrinsic rights (Martínez and Acosta 2017). Nature can be used to satisfy basic needs, although it can also be used to obtain benefits if its capacity for maintenance and reproduction is respected (Gudynas 2015).

Extractivism is a clear example of violation of the rights of nature, as it generates pollution and does not respect the biophysical limits of the planet and its resilience. Extractive and neo-extractive practices are causing enormous environmental impacts and break the balance that should exist between human beings and the rest of nature (Acosta et al. 2021).

Developmentalist policies and models are direct causes of the unsustainability affecting the world. "Development, as a reedition of the lifestyles of the central countries, is unrepeatable at the global level" (Acosta 2015: 303), an issue that had already been

warned decades ago by Meadows et al. (1972). Despite that economic growth as a fundamental pillar of development is unsustainable and does not guarantee social welfare (Gudynas 2017), Unceta Satrústegui (2014) recognizes that there are countries that still need to grow and increase their productive capacity to meet their basic needs.

The transition to the new civilizational model proposed by the ecological *buen vivir* depends on the inevitable decommodification of nature and human relations, the dematerialization of wealth and the decentralization of power and decision-making (Unceta Satrústegui 2014). The ecological *buen vivir* opts for an economy based on solidarity, sustainability, food sovereignty, reciprocity, complementarity, redistribution, responsibility, integrality, relationality, "community self-reliance", sufficiency, cultural diversity, equity, democratization of land and property, citizen participation and transparency (Acosta 2015; León T. 2012).

This way of understanding the economy also affects the role of the Market and the State. The ecological *buen vivir* seeks to transit from "a market society to a society with markets" (Unceta Satrústegui 2014: 191), i.e., to encourage other forms of market such as peasants, indigenous, cooperatives, etc., which work under other logics. In this context, the State is in charge of facilitating the transition and promoting new social, economic, cultural, gender, ethnic, intergenerational values... In addition, the State must guarantee equal opportunities and the same possibilities of choice. This implies putting an end to the privatizing and deregulating dynamics that lead States to a situation in which they do not have the resources and power to intervene against the private sector and the Market (Acosta et al. 2021).

As can be seen, the ecological *buen vivir* and the indianist *sumak kawsay* have many points in common. Particularly noteworthy are their commitment to biocentric models and their rejection of economic development policies. However, developmentalism is a fundamental element within the socialism of *buen vivir*, since this trend claims from its foundations the construction of an alternative development model (Féliz 2015; Hidalgo-Capitán and Cubillo-Guevara 2017; Larrea Maldonado 2012; Ramírez Gallegos 2010c).

Another fundamental element within the socialism of *buen vivir* is equality. Achieving equality is the central axis on which all *sumak kawsay* socialism is sustained. The rest of its principles and proposals are molded to the achievement of this objective.

The socialism of *buen vivir* advocates that equality must reach all spheres of life and society, for which it is necessary to eliminate asymmetrical power relations, involve citizens in decision-making, achieve gender equality, build a plurinational and intercultural State, improve the population's access to justice, strengthen access to public goods, ensure free and leisure time, and redistribute wealth and ownership of the means of production (Larrea Maldonado 2014; MPD 2015; Ramírez Gallegos 2010b; SENPLADES 2013).

To achieve this equality, the representatives of this trend bet on a transition process towards a State capitalist system or market socialism and, subsequently, towards

the socialism of *buen vivir*. To this end, in the short term they advocate carrying out economic policies aimed at redistributing wealth and the means of production, generating a progressive tax system and a modern public treasury, reappropriating strategic economic sectors and controlling and limiting the power of the market (García-Linera 2010; Ramírez Gallegos 2010a; SENPLADES 2012 and 2013).

In addition, it is stated that the productive matrix should prioritize use value over exchange value, generate environmentally sustainable growth and accumulation, promote the decommodification of the economy and reorient production and wealth to the welfare of society. Thus, it is established that the social and solidarity economy must guide and determine the productive matrix and the strategy for the generation and accumulation of wealth determined by the socialism of *buen vivir* (Harnecker 2011; Ramírez Gallegos 2010a).

However, the achievement of this socialist sustainability present numerous contradictory proposals. Ramírez Gallegos (2010a and 2010b) and Prada Alcoreza (2011) advocate the recovery of traditional national industry and the strengthening of the primary-export model in the short term as a means to obtain the resources to change the model of wealth generation and accumulation. SENPLADES (2012) and MPD (2015) also claims and justifies the implementation of extractive and primary-export actions, as well as the exploitation of biodiversity as a means to achieve greater competitiveness in international markets and grow the added value of the economy. García-Linera (2010), for his part, defends directing all production to the satisfaction of basic needs, although he highlights the need to build an economy that can generate surpluses and compete in international markets.

In short, we are faced with an economic approach that does not renounce growth and unlimited accumulation, which configures an ecologically unsustainable model. In the same way, the decommodification of life, the predominance of use values and the implementation of the social and solidarity economy are incompatible with the proposals made. The great influence of Development Economics on the socialist *buen vivir* is highlighted.

On the other hand, the State also plays an enormous role within the socialist model of *buen vivir*, since it assumes a more active role in all socio-economic processes. According to Cárdenas Aguilar (2012), Prada Alcoreza (2014) and Ramírez Gallegos (2010a) the new State has to be plurinational and intercultural and has to guarantee decolonization, decentralization and the elimination of any discrimination towards non-Western peoples and nationalities. These proposals would be materialized through the configuration of flexible, decentralized and autonomous state institutions, adapted to territorial particularities.

In addition, the socialist state is the guarantor of the so-called "radical participatory democracy" (Patiño 2010), which is defined as a form of permanent dialogue between and with the citizenry. In this way, the citizenry is the one who truly defines the development and direction of public and private policies. Falconí (2012) affirms that dialogue and consensus must be part of all possible spaces: the State,

companies, political movements, the family, interpersonal relationships, the neighborhood, schools, common spaces...

However, among the socialist authors of *buen vivir* there is no consensus on what exactly the functions of the new State should be, nor what the limits of State intervention should be.

As previously mentioned, some authors defend a State with "flexible, decentralized and autonomous institutions, adapted to territorial particularities". Nevertheless, the author Prada Alcoreza (2011a and 2011b) resorts to the return of the figure of the omnipresent and omnipotent State. The State would be in charge of economic and social planning, controlling the processes of production, distribution and redistribution of goods, monopolizing strategic economic sectors, promoting industrialization, modernization and the increase of added value in production, and guaranteeing socialist competitiveness in international markets³.

Other authors consider that the State must establish mechanisms to control property. Larrea (2010) defends subjecting private property to the social interest, Harnecker (2010: 78) speaks of "social ownership of the means of production", Prada Alcoreza (2011a) claims that private property must follow the orders of the State, and Falconí (2012) and Féliz (2015) consider that the exploitation of natural resources must depend on State dictates.

Thus, in the socialist approaches of *buen vivir*, a mixture of possible State models appears, ranging from centralist models of central planning to decentralized models such as federal ones.

In short, the socialism of *buen vivir*, although it can be structured mainly around four blocks that define the fundamental points of its ideas and claims, shows a lack of theoretical articulation between the different works carried out by its main representatives. Moreover, in many cases, the policies implemented, supported and made by the socialist representatives of *sumak kawsay*, were contrary to their own theoretical approaches.

This lack of articulation has derived in a huge scientific confusion to define what is socialist *buen vivir*: Ramírez Gallegos (2010b) defends that *sumak kawsay* socialism has its own identity, De Sousa Santos (2010) that it is a form of twenty-first century socialism with certain particularities, Borón (2008) that it is twenty-first century socialism and *buen vivir* socialism are the same, García-Linera (2015) that it is a type of communitarian socialism, Lyall et al. (2018) that it is a form of strategic appropriation, Pereira da Silva (2020) that it is a socialist strategy that has emptied the *buen vivir* of its content, Vanhulst et al. (2020) that it is ecomarxist development, and Oviedo Freire (2016) that socialism and *sumak kawsay* are two totally incompatible concepts.

The influence of development economics, twenty-first century socialism, neo-Marxism, ecosocialism and socialist feminism, i.e., of developmentalism and socialism

³ These 2011 approaches by Raúl Prada Alcoreza are radically different (opposed) to those expressed in 2014 (Prada Alcoreza 2014).

in general terms, is clear in the socialism of *buen vivir*; however, the influence of *buen vivir* or *sumak kawsay* in its approaches is neither obvious nor unquestionable. At present, there is an ongoing debate on whether or not this trend belongs to the category of *buen vivir*.

The socialism of *buen vivir*, despite being a heterodox trend, has similar limitations to orthodox models based on growth and accumulation.

In any case, the socialism of *buen vivir* has been in decline for years. In Ecuador, it disappeared from the political scene after the departure of Rafael Correa from the presidency and of the socialist intellectuals of buen vivir who supported it. In Bolivia, its importance has also been declining. In the last years of Evo Morales' government, *vivir bien* or *suma qamaña* has been losing relevance, and although the current president Luis Arce has vindicated *vivir bien*, he has not given it a prominent role in public policies and institutions.

Table 2. Differences between the different trends of *buen vivir*.

	Indianist sumak kawsay	Ecological <i>buen</i> vivir	Socialism of buen vivir
Biocentrism / Anthropocentrism	Biocentrism	Biocentrism	Anthropocentrism
Rights of nature	Nature has a life and energy of its own. It must be in balance and harmony with nature.	Nature has its own rights and intrinsic value	The rights of nature must be subject to the interests of the people.
Interculturality / plurinationality	Interculturality and plurinationality	Interculturality and plurinationality	Interculturality and plurinationality
Alternative to development / Alternative development	Alternative to development	Alternative to development	Alternative development
Economic model	Self-sufficiency economy	Austere economy to care for life	Market Socialism / State Capitalism
Economic growth	It destroys balance and harmony with nature	Growth and sustainability are incompatible. However, there are countries that still need to grow in order to meet their basic needs	It is necessary to generate wealth
Capital accumulation	Production surpluses have a communal appropriation or are used within the	It destroys nature and is a source of social inequalities.	It is necessary to enrich the population and maintain equality

	institution of the party		
Work	One must work enough to live well, not better. Work is a way of relating to the community and a liturgical activity	Work cannot have accumulation as an end. Productive and reproductive work must be recognized on equal terms	Work is the main source of income for the population. A better distribution and redistribution must be favored
Globalization	It has favored the destruction of nature and acculturation	Knowledge and scientific advances must be shared globally	Wealth can be generated through international markets

Source: own elaboration.

IV. Socialism of buen vivir: same path, same constraints.

The socialism of *buen vivir* is an alternative form of development that, like the other developmentalist trends, fails to solve the problems raised fifty years ago in *The Limits to Growth*. This trend presents a different discourse from other forms of development, but the basic problem remains the same: unlimited growth is not possible on a limited planet.

At the theoretical level, the socialism of *sumak kawsay* presents multiple contradictions and inconsistencies: promoting extractivism to finance sustainability, pursuing infinite economic growth on a planet of limited resources, conditioning the rights of nature to the economic interests of the country, claiming a return to use values but pursuing wealth through exchange values, defending global cooperation but pursuing greater competitiveness at the international level...

These theoretical contradictions were reflected at a practical level in Ecuadorian politics between 2007 and 2017. During that period Alianza PAÍS governed Ecuador with Rafael Correa at the helm and the socialism of *buen vivir* became the statist trend of *buen vivir*.

To understand the project of socialist *buen vivir*, it is necessary to understand the productive matrix of the country, which for decades has shown an enormous dependence on the primary-export sector and extractivism. During the period 2007-2017, despite the theoretical support from the intellectuals of the socialism of *sumak kawsay* and the different National Plans of Buen Vivir (Planes de Nacionales del Buen Vivir) and economic transformation plans, Ecuador did not alter its productive matrix and continued to depend on the extractivist sector.

An analysis of Ecuador's trade balance shows the country's enormous dependence on oil (Figure 1).

10000 8000 6000 4000 Million dollars 2000 0 -2000 -4000 -6000 -8000 -10000 2012 2013 2014 2011 Years ■ Trade balance (total) Oil trade balance ■ Non-oil trade balance

Figure 1. Evolution of Ecuador's trade balance (2007-2017).

Source: own elaboration based on data from Banco Central de Ecuador (2010, 2014 and 2018).

Ecuador's non-oil trade balance was in deficit during all the years that Rafael Correa and the representatives of the socialism of *buen vivir* were at the helm of the Ecuadorian government. Oil is the product that allows Ecuador's trade balance to be stable. However, despite oil revenues, the country managed to generate trade surpluses in only five of the eleven years analyzed.

Commodity markets are characterized by highly volatile prices and countries dependent on these sectors are exposed to external shocks. In the Ecuadorian case, the trade deficits of years such as 2010 and 2015, which are the largest in the entire series, coincide with significant drops in oil prices (Statista 2022).

Ecuador's trade dependence on oil goes beyond a mere analysis of its trade balance. In 1998, an enormous crisis began in the Andean country that spread through different sectors of the economy and also generated an inflationary and exchange rate crisis. Inflation grew from 36,1% in 1998 to 96,09% in 2000, and the exchange rate reached a historic low in 1999 (1 U.S. dollar = 11.786,80 Ecuadorian sucres) (World Bank 2022). On January 9, 2000, President Jamil Mahuad Witt announced the adoption of the U.S. dollar as Ecuador's official currency, seeking to solve the monetary and inflationary crisis. From then until today, the U.S. dollar continues to be the legal tender in the Andean country, which resulted in the loss of control of monetary policy as an economic instrument.

Ecuador is a country obliged to maintain its trade balance with positive results, otherwise it is exposed to the loss of its official currency, that is, the U.S. dollar (USD). For this reason, oil, as well as the rest of the commodities on which Ecuador depends, also have a monetary lifeline function.

A representative case of this situation during the socialist government of buen vivir occurred in 2015. In that year, oil prices decreased, the dollar revalued and primaryexporting countries such as Colombia and Peru devalued their currencies. Faced with this situation, the Alianza PAÍS government was forced to boost mining to correct the trade and monetary imbalances that were affecting the Ecuadorian economy (Banco Central de Ecuador 2016).

Now, Rafael Correa's government boosted mining activities since its establishment. It had enormous repercussions when in early 2012, President Correa publicly declared that Ecuador was beginning "a new era, the mining era". This statement was accompanied by the following phrase that generated huge protests against the president: "we cannot be beggars sitting on a sack of gold" (Mena Erazo 2012).

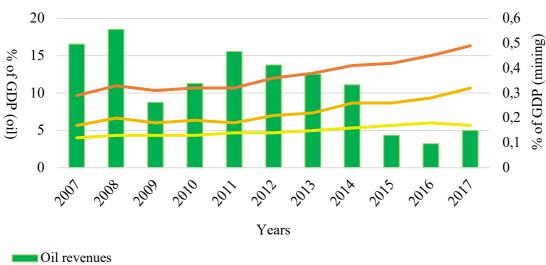


Figure 2. Evolution of the share of oil and mining in Ecuador's GDP (2007-2017).

Mining of metallic minerals

Mining and quarrying of non-metallic minerals and support activities for mines and quarries

Mining and quarrying

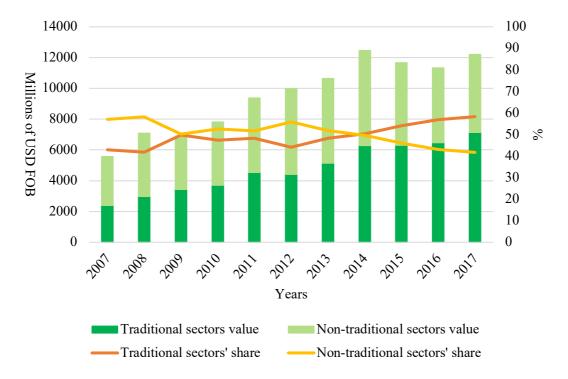
Source: own elaboration based on data from Banco Central de Ecuador (2019) and World Bank (2022).

The weight of mining on the Ecuadorian GDP is not as remarkable as that of oil, since the sum of the exploitation of metallic and non-metallic minerals and support activities for mines and quarries do not reach 0,5% of the GDP value in the period with the highest values (2017). However, the trend followed by these activities is noteworthy, as their values increased year by year. Specifically, in 2012, the year in which Rafael Correa announced the beginning of the Ecuadorian mining era, mining and quarrying in the country grew significantly. Mining and quarrying increased by 11,11% in a single year and from 2011 to 2017 the increase was 53,13%.

In contrast, oil accounted for more than 11% of Ecuador's GDP in most of the years analyzed. Those years in which its weight on GDP decreased coincide with falls in oil prices. Thus, from 2008 to 2009 prices fell by 35,32%, from 2014 to 2015 by 48,60%, from 2015 to 2016 by 17,64% and in 2017 prices increased, but remained 45,47% lower than in 2014 (Statista, 2022).

On the other hand, other products that had an enormous weight on the Ecuadorian economy were those that made up the so-called "traditional" sectors: bananas, plantains, shrimp, cocoa, coffee and tuna and fish. These commodities have had an enormous weight on the Ecuadorian economy for decades (Larrea Maldonado, 2012). At the beginning of Correa's term, these commodities accounted for more than 41% of the value of the non-oil trade balance and by the end of his term they climbed to 58,3%.

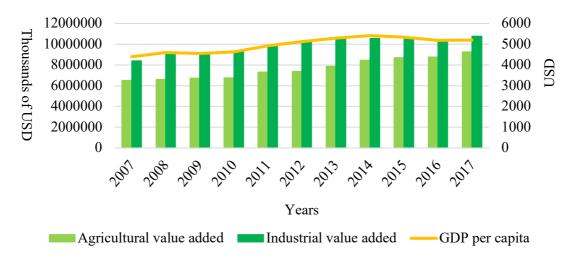
Figure 3. Value in millions of U.S. dollars FOB and share of traditional and non-traditional sectors in Ecuador's non-oil trade balance (2007-2017).



Source: own elaboration based on data from Banco Central de Ecuador (2008, 2012, 2015, 2017 and 2018).

The growth of the agricultural sector in the Ecuadorian economy grew year by year. In 2007 it contributed US\$6.498,57 million to the national GDP and in 2017 it went on to contribute US\$9.258,65 million, meaning that it increased by 42,47%. The industrial sector also grew with the socialist government, however its rates were lower. Its relative weight in the national GDP was progressively reduced and that of the agricultural sector grew. Ecuador was a country highly dependent on the primary sector before the government of Rafael Correa and after his departure it became more so.

Figure 4. Evolution of value added in agriculture and industry and GDP per capita in Ecuador (2007-2017) at constant 2010 prices.

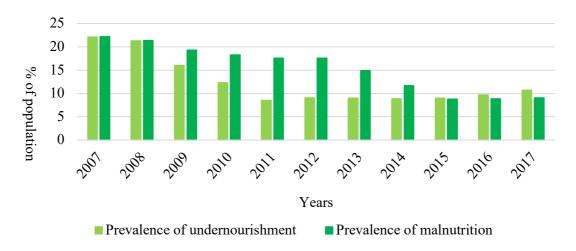


Source: own elaboration based on data from World Bank (2022).

GDP per capita, on the other hand, grew by an average of 1,75% per year during the period analyzed. However, it was not a stable growth, alternating periods with negative variation rates (2009, 2015 and 2016), growth rates close to 0 (2017), growth rates of 1,5%-3,5% (2010, 2013 and 2014), and growth rates above 4% (2008 and 2011) and even 6% (2012). These instabilities are substantially generated by the country's dependence on sectors whose prices are volatile, that is, commodity prices.

On the other hand, the drop in undernourishment and malnutrition is very remarkable. Both indicators were above 22% at the beginning of Rafael Correa's term of office and reached rates below 10%. In the case of undernourishment prevalence, in 2011 it reached its minimum. From then on it began a slow growth that closed 2017 with a prevalence of 10,7%. The prevalence of undernutrition, on the other hand, stopped its decline in 2016. Thus, it reversed its trend of the previous nine years and stood at 9,1% in 2017.

Figure 5. Prevalence of undernourishment and malnutrition in Ecuador (2007-2017).



Source: own elaboration based on data from FAO (2022a and 2022b) and World Bank (2022).

Ecuador was a country that saw its population increase from 2007 to 2017. Despite the fact that the country's fertility rates have fallen unstoppably over the last decades, in 2017 the number of births per woman was 2,451 children, i.e., it was higher than the 2,1 children needed to ensure generational replacement (Miller and Mejía-Guevara 2020). The reduction in the prevalence of malnutrition and undernourishment are not the only factors that explain this increase. Other factors have also contributed to this population growth, such as improvements in the health system, the reduction in the prevalence of anemia in childhood, the decrease in mortality rates in children under five years of age, the increase in life expectancy, improvements in the education system, greater and better access to drinking water... (FAO 2022a; World Bank 2022).

17000 2.75 2,7 16500 2,65 16000 Thousands of people 2,6 15500 2,55 15000 2,5 14500 2,45 14000 2,4 13500 2,35 13000 2,3 2012 Years Total population Fertility rate

Figure 6. Evolution of population and fertility rate per woman in Ecuador (2007-2017).

Source: own elaboration based on data from World Bank (2022).

The effect of deaths on the population (negative population feedback loop) slowed population growth, but since it was less than the impact of the positive feedback loops, the population followed the exponential growth path predicted by Meadows et al. (1972).

Another element that slowed population growth was emigration. Ecuador has historically been a country with negative net migration rates. These rates have been decreasing as the Ecuadorian economy and the country's development indices have grown. During the Rafael Correa administration, net migration followed a declining path. At the beginning of 2007 net migration was close to 800.000 people, but in 2017 this decreased to values close to 211.000 people.

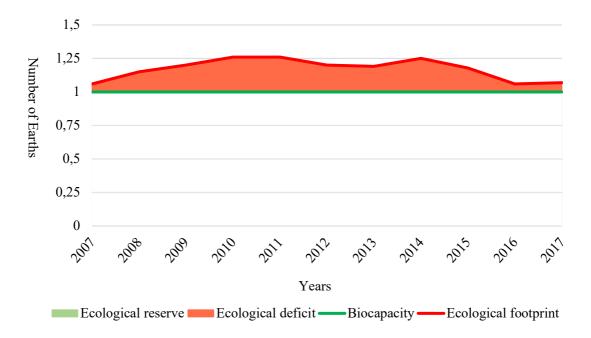
Finally, the environmental evolution of Ecuador has to be analyzed. Meadows et al. (1972) argued that growth would lead to the collapse of societies. During the years analyzed, the Ecuadorian socio-economic model generated multiple forms of growth.

Studies indicate that Ecuador is a country in which pollution grows year by year (Barraza et al. 2020; Carrillo et al. 2021; Estrella et al. 2019) and natural resources

decrease (Global Footprint Network 2022). The deforestation process being experienced throughout the country has been a particularly worrisome problem for decades. The entire Ecuadorian economic policy favored and is still favoring that process. Deforestation has been strengthened due to the implementation of different development plans that promote extractivism, large-scale natural resource extraction, the growth of agricultural borders, economic dependence on forestry and agricultural activities in large regions of the country (especially tropical regions), the widespread economic dependence of the poorest sectors of the population on forestry and agricultural activities for subsistence, the use of firewood as the most common fuel among lower-income households, the scarcity of reforestation and nature conservation programs, and population growth, among other factors (Fischer et al. 2021; Heredia-R et al. 2021; Vallejo and Caicedo 2020).

The first time Ecuador presented an ecological deficit was in 1994. However, from that date until 2004, the country oscillated between ecological deficit and surplus. 2006 was the last year in which the country presented values close to neutrality (ecological deficit of 0,01). From 2007 onwards, Ecuador began a pronounced deficit path that has continued to the present day.

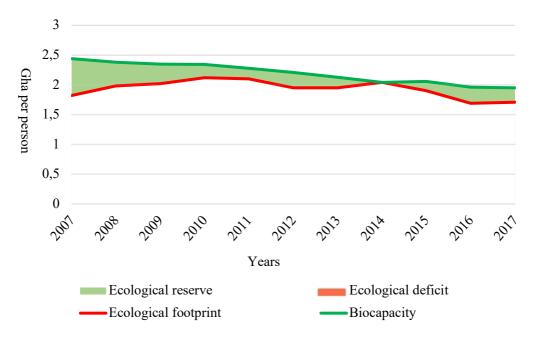
Figure 7. Evolution of Ecuador's ecological footprint and biocapacity (2007-2017) in number of Earths.



Source: own elaboration based on data from Global Footprint Network (2022).

On the other hand, the ecological footprint per person remained in surplus from 2007 to 2017, although the biocapacity per person progressively decreased and the ecological footprint increased. The year 2014 showed a null result, that is. biocapacity and ecological footprint presented the same result (2,04). Based on the previous trend, 2015 seemed destined to become the year in which for the first time the country presented an ecological deficit per person. However, the gap between biocapacity and ecological footprint increased again for two years, although it narrowed again in 2017.

Figure 8. Evolution of the ecological footprint and biocapacity in Ecuador (2007-2017) in global hectares per person.



Source: own elaboration based on data from Global Footprint Network (2022).

Population growth is one of the factors that has contributed to this decrease in ecological reserves, but the relationship between development and ecological deficit is also well known. This phenomenon is common as countries obtain higher rates of development, since, once basic needs are covered and income increases, the population begins to consume and demand a greater quantity of goods and services (Wackernagel and Beyers 2019; Almont et al. 2020).

In short, Ecuador continued on the unsustainable path of growth that in 1972 was denounced by the interdisciplinary team of the Massachusetts Institute of Technology (MIT). In Ecuador, population growth, industrialization, food production, resource depletion and pollution increased.

Table 3. Growth or decrease in Ecuador of the categories analyzed in *The Limits to Growth*.

	Grew	Decreased
Poputation	✓	Χ
Industrialization	✓	Χ
Food production	✓	Χ
Resource depletion	✓	Χ
Contamination	✓	Χ

Source: own elaboration.

V. Conclusions and discussion.

The socialist *buen vivir* came to power in Ecuador in 2007 and remained in power until 2017. The socialist socio-economic project has numerous critics from different ideological positions. The indigenist *sumak kawsay* and the environmentalist *buen vivir* are two of the intellectual trends that showed the greatest rejection towards the government of Rafael Correa and the socialists of the *buen vivir*.

The indigenist *sumak kawsay* and the ecological *buen vivir* advocate for an alternative project to capitalism, neoliberalism and developmentalism for Ecuador. These two trends have many similarities in their approaches. Particularly significant is their defense of the construction of a biocentric society and values, which would guarantee balance and harmony with nature and respect the biophysical limits of the planet.

On the other hand, the socialism of *buen vivir* positions itself against capitalism and neoliberalism, but in favor of development. This trend seeks to generate an economic model that achieves unlimited growth and accumulation. However, the way to reach the socialism of *sumak kawsay* and build its socio-economic model is not clear, as there are multiple contradictions among its authors.

In *The Limits to Growth*, its authors predicted the collapse of human societies due to the unsustainability of population growth, industry, consumption of natural resources and pollution. To this must be added insufficient quantities of food for the population in an environment whose productive capacities are limited.

During the socialist stage (2007-2017), food production increased, and undernourishment and malnutrition decreased, although the other categories mentioned also showed high growth rates. Through the analysis of different indicators, it was possible to determine the medium- and long-term unsustainability of the socialist project of *buen vivir*. In addition, Ecuador increased its dependence on extractive economic sectors, moving away from the "biopolis" that theoretically would be the socialism of *buen vivir*.

At present, the socialist *buen vivir* has disappeared from the public sphere and debates about that stage are focused on the figure of former president Rafael Correa and the corruption cases attributed to him. On the other hand, in Bolivia, the so-called communitarian socialism of *vivir bien* was progressively losing importance during the presidency of Evo Morales (2006-2019). Luis Arce, current president of Bolivia, has claimed the value of *suma qamaña/vivir bien* in interviews, but the reality is that these concepts have a marginal role within his government.

The socialism of *buen vivir* was a new attempt at sustainable developmentalism that, once again, the biophysical limits of planet Earth have shown to be unsustainable in the medium and long term.

VI. Bibliographical references.

- Acosta A. (2010). El Buen Vivir, una utopía por (re)construir. *Revista Casa de Las Américas*, 257. URL: https://www.fuhem.es/media/cdv/file/biblioteca/Conflictos_socioecologicos/Especial-WEB/Buen vivir A ACOSTA.pdf
- Acosta A. (2015). El Buen Vivir como alternativa al desarrollo. Algunas reflexiones económicas y no tan económicas. *Política y Sociedad*, *52* (2): 299–330. DOI: https://doi.org/https://doi.org/10.5209/rev_POSO.2015.v52.n2.45203
- Acosta A., P. García-Macías and R. Munck (2021). *Posdesarrollo. Contexto, contradicciones y futuros*. Quito, Ediciones Abya-Yala.
- Alianza PAÍS (2006). Plan de Gobierno de Alianza PAÍS 2007-2011: ¡Porque otro país es posible! Un primer gran paso para la transformación radical del Ecuador. Quito, Alianza PAÍS.
- Almond R.E.A., M. Grooten and T. Peterson (eds.)(2020). *Living Planet Report 2020: Bending the curve of biodiversity loss*. Gland, World Wildlife Fund. URL: https://www.worldwildlife.org/publications/living-planet-report-2020
- Altmann P. (2019). Los pueblos indígenas en el buen vivir global, un concepto como herramienta de inclusión de los excluidos. *Revista Iberoamericana de Estudios de Desarrollo = Iberoamerican Journal of Development Studies*, 8 (1): 58–80. DOI: https://doi.org/https://doi.org/10.26754/ojs_ried/ijds.334
- Ávila Santamaría R. (2019). La utopía del oprimido: los derechos de la naturaleza y el buen vivir en el pensamiento crítico, el derecho y la literatura. Ciudad de Mexico, Ediciones Akal.
- Banco Central de Ecuador (2008). *Ecuador: Evolución de la Balanza Comercial: Enero Diciembre* 2007. URL: https://contenido.bce.fin.ec/documentos/Estadisticas/SectorExterno/BalanzaPagos/balanzaComercial/indicepp.htm
- Banco Central de Ecuador (2010). *Ecuador: Evolución de la Balanza Comercial. Enero Diciembre* 2009. URL:
 https://contenido.bce.fin.ec/documentos/Estadisticas/SectorExterno/BalanzaPagos/balanzaComercial/indicepp.htm
- Banco Central de Ecuador (2012). Evolución de la Balanza Comercial: Enero Diciembre 2011. URL: https://contenido.bce.fin.ec/documentos/Estadisticas/SectorExterno/BalanzaPagos/balanzaComercial/indicepp.htm
- Banco Central de Ecuador (2014). Evolución de la Balanza Comercial: Enero Diciembre 2013. URL: https://www.bce.fin.ec/index.php/component/k2/item/299-evolución-de-la-balanza-comercial
- Banco Central de Ecuador (2015). Evolución de la Balanza Comercial: Enero Diciembre 2014. URL: https://contenido.bce.fin.ec/documentos/Estadisticas/SectorExterno/BalanzaPagos/balanzaComercial/indicepp.htm
- Banco Central de Ecuador (2016). *Reporte de minería. Julio de 2016*. URL: https://contenido.bce.fin.ec/documentos/Estadisticas/Hidrocarburos/ReporteMinero

- 072016.pdf
- Banco Central de Ecuador (2017). Evolución de la Balanza Comercial: Enero Diciembre 2016. URL: https://contenido.bce.fin.ec/documentos/Estadisticas/SectorExterno/BalanzaPagos/balanzaComercial/indicepp.htm
- Banco Central de Ecuador (2018). Evolución de la Balanza Comercial: Enero Diciembre 2017. URL: https://www.bce.fin.ec/index.php/component/k2/item/299-evolución-de-la-balanza-comercial
- Banco Central de Ecuador (2019). *Reporte de minería. Julio 2019*. URL: https://contenido.bce.fin.ec/documentos/Estadisticas/Hidrocarburos/MineriaIndice. htm
- Barraza F., G. Uzu, J.L. Jaffrezo, E. Schreck, H. Budzinski, K. Le Menach, M.-H. Dévier, H. Guyard, A. Calas, M.-I. Perez, L.-A. Villacreces and L. Maurice (2020). Contrasts in chemical composition and oxidative potential in PM10 near flares in oil extraction and refining areas in Ecuador. *Atmospheric Environment*, 223: 117302. DOI: https://doi.org/10.1016/j.atmosenv.2020.117302
- Borón A.A. (2008). El socialismo del siglo XXI: notas para su discusión. In Borón A.A. (Ed.)(2008): 97–138. Buenos Aires, Luxemburg.
- Cárdenas Aguilar F. (2012). Bolivia vive un proceso histórico. In Arkonada K. (Ed.)(2012): 11–16. La Paz, Ministerio de Culturas.
- Carrillo K.C., J.C. Drouet, A. Rodríguez-Romero, A. Tovar-Sánchez, G. Ruiz-Gutiérrez and J.R. Viguri Fuente (2021). Spatial distribution and level of contamination of potentially toxic elements in sediments and soils of a biological reserve wetland, northern Amazon region of Ecuador. *Journal of Environmental Management*, 289: 112495. DOI: https://doi.org/10.1016/j.jenvman.2021.112495
- De Sousa Santos B. (2010). La difícil construcción de la plurinacionalidad. In SENPLADES (Ed.)(2010): 149–154. Quito, SENPLADES. URL: https://www.planificacion.gob.ec/wp-content/uploads/downloads/2012/08/Socialismo-y-Sumak-Kawsay.pdf
- Estrella B., F. Sempértegui, O.H. Franco, M. Cepeda and E.N. Naumova (2019). Air pollution control and the occurrence of acute respiratory illness in school children of Quito, Ecuador. *Journal of Public Health Policy*, 40 (1): 17–34. DOI: https://doi.org/10.1057/s41271-018-0148-6
- Falconí F. (2012). El socialismo del siglo XXI y la aplicación de modelos políticos y económicos en Suramérica. Quito, SENPLADES.
- Féliz M. (2015). ¿Qué hacer... con el desarrollo? Neodesarrollismos, buenvivir y alternativas populares. *Sociedad y Economía*, 28: 29–50. URL: http://sociedadyeconomia.univalle.edu.co/index.php/sociedad_y_economia/ article /view/3928
- Fischer R., F. Tamayo Cordero, T. Ojeda Luna, R. Ferrer Velasco, M. DeDecker, B. Torres, L. Giessen and S. Günter (2021). Interplay of governance elements and their effects on deforestation in tropical landscapes: Quantitative insights from Ecuador. *World Development*, 148: 105665. DOI: https://doi.org/10.1016/j.worlddev.2021.105665
- FAO (2022a). FAOSTAT Food and Agriculture Organization. URL:

- https://www.fao.org/faostat/en/#home
- FAO (2022b). Sustainable Development Goals | Food and Agriculture Organization. URL: https://www.fao.org/sustainable-development-goals/indicators/en/
- García-Linera Á. (2010). El Socialismo Comunitario. Un aporte de Bolivia al mundo. *Revista de Análisis: Reflexiones Sobre La Coyuntura*, 5.
- García-Linera Á. (2015, January 22). Socialismo Comunitario del Vivir Bien. *América Latina En Movimiento*. URL: https://www.alainet.org/es/active/80343
- Global Footprint Network (2022). *Open Data Platform Global Footprint Network*. URL: https://data.footprintnetwork.org/#/
- Gudynas E. (2015). *Derechos de la naturaleza: Ética biocéntrica y políticas ambientales*. Buenos Aires, Tinta Limón.
- Gudynas E. (2017). Posdesarrollo como herramienta para el análisis crítico del desarrollo. *Estudios Críticos Sobre El Desarrollo*, 7 (12): 193–210.
- Harnecker M. (2010). El nuevo modelo económico del socialismo del siglo XXI. Algunos elementos para la discusión. In SENPLADES (Ed.)(2010): 77–90. Quito, SENPLADES. URL: https://www.planificacion.gob.ec/wp-content/uploads/downloads/2012/08/Socialismo-y-Sumak-Kawsay.pdf
- Harnecker M. (2011). Ecuador: una nueva izquierda en busca de la vida en plenitud. Sevilla, El Viejo Topo.
- Heredia-R M., B. Torres, F. Cabrera-Torres, E. Torres, C.G.H. Díaz-Ambrona and S.E. Pappalardo (2021). Land Use and Land Cover Changes in the Diversity and Life Zone for Uncontacted Indigenous People: Deforestation Hotspots in the Yasuní Biosphere Reserve, Ecuadorian Amazon. *Forests*, *12* (11): 1539. DOI: https://doi.org/10.3390/f12111539
- Herrero Y. (2020). *Agenda feminista mundo rural*. URL: https://www.youtube.com/watch?v=fy-ARVWjXLc
- Hidalgo-Capitán A.L. and A.P. Cubillo-Guevara (2017). Deconstrucción y genealogía del "buen vivir" latinoamericano. El (trino) "buen vivir" y sus diversos manantiales intelectuales. *Revue Internationale de Politique de Développement*, 9. DOI: https://doi.org/https://doi.org/10.4000/poldev.2517
- Inuca Lechón J.B. (2017). Genealogía de alli kawsay/sumak kawsay (vida buena/vida hermosa) de las organizaciones kichwas del Ecuador desde mediados del siglo XX. *Latin American and Caribbean Ethnic Studies*, *12* (2). DOI: https://doi.org/https://doi.org/10.1080/17442222.2017.1325101
- Larrea A.M. (2010). La disputa de sentidos por el buen vivir como proceso contrahegemónico. In SENPLADES (Ed.)(2010): 15–27. Quito, SENPLADES. URL: https://www.planificacion.gob.ec/wp-content/uploads/downloads/2012/08/Socialismo-y-Sumak-Kawsay.pdf
- Larrea Maldonado A.M. (2012). Modo de desarrollo, organización territorial y cambio constituyente en el Ecuador. Quito, SENPLADES.
- Larrea Maldonado A.M. (2014). El Buen Vivir como alternativa civilizatoria. In Endara G. (Ed.)(2014): 238–254. Quito, Friedrich-Ebert-Stiftung. URL: https://library.fes.de/pdf-files/bueros/quito/11348.pdf

- Larrea Maldonado C. (2012). Hacia la definición de una línea de codicia: aportes conceptuales y empíricos sobre América Latina y Ecuador. *Comentario Internacional. Revista Del Centro Andino de Estudios Internacionales*, 12: 113–166. URL: https://revistas.uasb.edu.ec/index.php/comentario/article/view/65
- León T. M. (2012). Redefiniciones económicas hacia el buen vivir: un acercamiento feminista. URL: http://www.forum.awid.org/forum12/es/2012/12/redefiniciones-economicas-hacia-el-buen-vivir-un-acercamiento-feminista/
- Lyall A., R. Colloredo-Mansfeld and M. Rousseau (2018). Development, Citizenship, and Everyday Appropriations of Buen Vivir: Ecuadorian Engagement with the Changing Rhetoric of Improvement. *Bulletin of Latin American Research*, *37* (4). DOI: https://doi.org/https://doi.org/10.1111/blar.12742
- Macas L. (2010). El Sumak Kawsay. *Revista Yachaykuna*, *13*: 13–39. URL: http://icci.nativeweb.org/yachaikuna/Yachaykuna13.pdf
- Maldonado L. (2010a). El Sumak Kawsay / Buen Vivir / Vivir Bien. La experiencia de la República del Ecuador. In Hidalgo-Capitán A.L., A. Guillén García and N. Deleg Guazha (Eds.)(2014): 195–210. Huelva/Cuenca, CIM/PYDLOS/FIUCUHU. URL: https://dspace.ucuenca.edu.ec/bitstream/123456789/21745/1/Libro Sumak Kawsay Yuyay.pdf
- Maldonado L. (2010b). Interculturalidad y políticas públicas en el marco del Buen Vivir. In Fernández-Juárez G. (Ed.)(2010): 81–90. Quito, Ministerio de Salud Pública.
- Martínez E. and A. Acosta (2017). Los Derechos de la Naturaleza como puerta de entrada a otro mundo posible. *Revista Direito e Práxis*, 8 (4): 2927–2961. DOI: https://doi.org/10.1590/2179-8966/2017/31220
- Meadows D.H., D.L. Meadows, J. Randers and W.W. Behrens (1972). *The Limits to Growth*. New York, Universe Books.
- Medina J. (2011). Acerca del suma qamaña. In Farah H. I. and L. Vasapollo (Eds.)(2011): 39–64. La Paz, CIDES-UMSA. URL: http://biblioteca.clacso.edu.ar/clacso/engov/20131216115814/VivirBien.pdf
- Mena Erazo P. (2012, January 12). Ecuador apuesta su crecimiento a la minería a gran escala. *El País*. URL: https://elpais.com/internacional/2012/01/12/actualidad/1326385590 917311.html
- Miller T. and I. Mejía-Guevara (2020). El envejecimiento de la población en Ecuador: la revolución silenciosa. In F. Cevallos Tejada (Ed.)(2020): 17–23. Quito, Consejo Nacional para la Igualdad Intergeneracional. URL: https://www.researchgate.net/publication/343933073_El_envejecimiento_de_la_po blacion_en_Ecuador_la_revolucion_silenciosa
- MPD (2015). Plan Nacional de Desarrollo. "Bolivia digna, soberana, productiva y democrática para vivir bien". Lineamientos estratégicos 2006 2011. La Paz, Ministerio de Planificación del Desarrollo.
- Oviedo Freire A. (2016). Sumak kawsay: Arte de vivir en armonía. De la revolución verde a la revolución arcoíris. La Paz, Global Sur Editores.
- Patiño R. (2010). Diferencias entre el socialismo del siglo XX y el socialismo del siglo XXI. La democracia participativa y el nuevo sujeto revolucionario. In SENPLADES (Ed.)(2010): 133–140. Quito, SENPLADES. URL: https://www.planificacion.gob.ec/wp-

- content/uploads/downloads/2012/08/Socialismo-y-Sumak-Kawsay.pdf
- Pereira da Silva F. (2020). Comparando conceitos da periferia global: por uma tipologia dos sentidos de ubuntu e de bem viver. *Izquierdas*, 49: 3524–3544. URL: http://izquierdas.cl/ediciones/2020/numero-49
- Prada Alcoreza R. (2011a). El vivir bien como alternativa civilizatoria: Modelo de Estado y modelo económico. In Lang M. and D. Mokrani (Eds.)(2011): 227–256. Quito: Fundación Rosa Luxemburg/Abya Yala. URL: https://www.rosalux.org.ec/producto/mas-alla-del-desarrollo/
- Prada Alcoreza R. (2011b). Horizontes del Estado Plurinacional. In Lang M. and D. Mokrani (Eds.)(2011): 159–184. Quito, Fundación Rosa Luxemburg/Abya Yala. URL: https://www.rosalux.org.ec/producto/mas-alla-del-desarrollo/
- Prada Alcoreza R. (2014). Descolonización y transición. Quito, Ediciones Abya-Yala.
- Ramírez Gallegos R. (2010a). La transición ecuatoriana hacia el Buen Vivir. In León I. (Ed.)(2010): 125–142. Quito, FEDAEPS.
- Ramírez Gallegos R. (2010b). Socialismo del sumak kawsay o biosocialismo republicano. In SENPLADES (Ed.)(2010): 55–76. Quito: SENPLADES. URL: https://www.planificacion.gob.ec/wp-content/uploads/downloads/2012/08/Socialismo-y-Sumak-Kawsay.pdf
- Ramírez Gallegos R. (2010c). Socialismo y sumak kawsay. In SENPLADES (Ed.)(2010): 5–6. Quito, SENPLADES. URL: https://www.planificacion.gob.ec/wp-content/uploads/downloads/2012/08/Socialismo-y-Sumak-Kawsay.pdf
- Rivas C.A., J. Guerrero-Casado and R.M. Navarro-Cerillo (2021). Deforestation and fragmentation trends of seasonal dry tropical forest in Ecuador: impact on conservation. *Forest Ecosystems*, 8 (1): 46. DOI: https://doi.org/10.1186/s40663-021-00329-5
- SENPLADES (2007). Plan Nacional de Desarrollo 2007-2010. Planificación para la Revolución Ciudadana. Secretaría Nacional de Planificación y Desarrollo de Ecuador. Quito, SENPLADES. URL: https://www.planificacion.gob.ec/plannacional-de-desarrollo-2007-2010/
- SENPLADES (2009). Plan Nacional para el Buen Vivir 2009-2013: Construyendo un Estado Plurinacional e Intercultural. Quito, SENPLADES. URL: https://www.planificacion.gob.ec/plan-nacional-para-el-buen-vivir-2009-2013/
- SENPLADES (2012). Transformación de la Matriz Productiva: Revolución productiva a través del conocimiento y el talento humano. Quito, SENPLADES. URL: https://docplayer.es/204327-Folleto-informativo-transformacion-de-la-matriz-productiva-revolucion-productiva-a-traves-del-conocimiento-y-el-talento-humano.html
- SENPLADES (2013). Plan Nacional para el Buen Vivir 2013-2017: Todo el mundo mejor. Quito, SENPLADES. URL: https://observatorioplanificacion.cepal.org/es/planes/plan-nacional-del-buen-vivir-2013-2017-de-ecuador
- Statista (2022). Evolución anual del precio medio del petróleo crudo fijado por la Organización de Países Exportadores de Petróleo (OPEP) de 1960 a 2020. URL: https://es.statista.com/estadisticas/635114/precio-medio-del-crudo-fijado-por-la-opep/

- Unceta Satrústegui K. (2014). Desmercantilización, Economía Solidaria y Buen Vivir: propuestas desde el postcrecimiento. In Unceta Satrústegui K. (Ed.)(2014): 153–196. Quito: Abya-Yala.
- Vallejo M.C. and M. Caicedo (2020). Economics of deforestation: Poverty, inequality and socio-environmental impacts of the consumption of firewood in Ecuador. *Panoeconomicus*, 67 (3): 405–431. DOI: https://doi.org/10.2298/PAN2003405V
- Vanhulst J., A.P. Cubillo-Guevara, A.E. Beling and A.L. Hidalgo-Capitán (2020). Los discursos políticos latinoamericanos sobre el buen vivir (1992-2017). *Ayer: Revista de Historia Contemporánea*, 119 (3): 163–193.
- Viteri Gualinga C. (2003). Súmak Káusai. Una respuesta viable al desarrollo. Quito, Universidad Politécnica Salesiana del Ecuador.
- Wackernagel M. and B. Beyers (2019). *Ecological Footprint: Managing Our Biocapacity Budget*. Gabriola Island, BC, New Society Publishers.
- Wolff J. (2018). Ecuador after Correa: The Struggle over the "Citizens" Revolution"." *Revista de Ciencia Política*, 38 (2). DOI: https://doi.org/10.4067/s0718-090x2018000200281
- World Bank (2022). World Bank Open Data | Data. URL: https://data.worldbank.org/
- Worldometer (2022). *Worldometer real time world statistics*. URL: https://www.worldometers.info/