

Costa Rica, Seven Steps for Sustainability Empowerment and Social Inclusion: A Transversalizing Tool.

Helen Temple, Professor, Universidad Veritas.

h temple@uveritas.cr

(506) 86332701,

Universidad Veritas

Zapote, San José, Costa Rica

Data, education and action for sustainability are lacking. We can identify huge gaps at the heart of our homes and everyday activities. Differentiated diagnosing for everyday sustainability action is needed, and the people who should diagnose, each and every one of us, are not empowered, educated and active in sustainability.¹ It has previously been concluded that individual responsibility along with political will for advancing sustainability are the 2 major sustainable development (SD) obstacles of our time.² Whilst recent shifts in political will should be celebrated (especially in the wake of global consensus for the Paris Climate Agreement) these must also be matched with identifiable shifts in individual responsibility. Yet listening to the applause for our world leaders, we can also hear: “when will the SD shift start trickling down? “Will it ever get to my neighbourhood?” We receive echoes of sustainability shifts while being told to change our own individual behaviour, our communities, our workplaces. Everyone, is on the brink of the global environmental crisis, but most disconnected from it, waiting for solutions from above, confused to act, or unsure how to take the first step. We get told to eat organic, reduce our footprints, recycle, plant a tree, but not where, when, how, with whom, for whom, for what, for how long? We are failing to transversalize not only the knowledge to navigate sustainability issues, but also failing to provide basic tools for the empowerment needed to take appropriate action. Simultaneously shying from consolidating social inclusion through sustainability education means empowerment, equity and ecosystem health continue to weaken. Innovations in sustainable educational approaches providing steps for people to be clearer about making their own decisions about sustainability are needed, with bold and bright instructions on the sustainability label and condensed sustainability techniques. The steps-tool for sustainability empowerment and social inclusion; *Steps for Everyday Sustainability for All (7-SESALLs)* propose just that: seven simple steps to engage us in a differentiating diagnosis of our surroundings and eco-socio-development contexts, enabling active citizens seeking healthier environments for all.³ The Steps include how to connect with ecosystems, human rights’ issues, development paradigms. They will be discussed in relation to the Costa Rican case study, where even with its oft-labelled socially inclusive economy and history of socially protective development strategies, the disconnect is clear. People simply do not know what development paradigm they inhabit; they lack understanding of the impediments to their own development, security and health. The sustainability disconnect is also clear. People might benefit from a welfare state or manage to hang on to disintegrating and shifting social safety nets, but know little about what type of SD is offered; unable to actively participate in creating the type they want. Costa Rica is rolling back the state and unfolding a version of SD which is failing to integrate and engage prepared and active citizens. Resulting in an SD “*a medias*”, a greening of the economy, weak SD without social inclusion.⁴ The dance

¹ Differentiated diagnosis being introduced and discussed in relation to sustainable development by Jeffrey Sachs (2005, 2015).

² George Monbiot, *Heat*. (London: Penguin Press, 2006).

³ 7-SESALL is the proposed action/application name for the Seven Steps for Sustainability Empowerment and Social Inclusion: The Seven Steps for Everyday Sustainability for All (7-SESALL). This action title will be used on the guides and literature for distribution among the public, for the pilot study and future studies.

⁴ “A medias” refers to half-way measures in the application of SD in Costa Rica-concluded by Helen Temple in *The Peace With Nature Initiative: The Oscar Arias Sanchez Presidential Administration. 2006-2010*. (London: University of London, 2013).

between business-as-usual and ecological modernity plays out, resulting in country wide green-washing and growing social exclusion. The seven steps proposed here hope to offer a way to help fix the ailing attempt at a sustainability lacking individual action, responsibility and inclusion. Being based on differential diagnosis, human needs, social inclusion, participatory approaches, and transversalising for sustainability methods, the beauty of them is - they can be activated by anyone, anywhere, at any time.

The following discusses sustainability with 1) a brief overview of the quality of Costa Rica's sustainable development context focusing on selected key indicators highlighting civil society participation, 2) a brief overview of the availability of sustainability guides and advice on how to apply sustainability at an everyday level, 3) the 7-SESALL proposal.

Sustainability Action Indicators:

Measuring everyday sustainability in Costa Rica needs urgent attention, but individual action is very hard to measure at this present stage of SD. We must identify indicators that help us understand if people are acting or not. We need to look at present sustainability indicators and ask of them: what can this indicator reveal about individual action? Does it reveal individual opportunity and responsibility to act? What are the outcomes? It seems that we are unclear about how to apply and act sustainably at an everyday level, and we are also unclear on how to measure it; SD indicators can be *silo-ed* and often hard to evaluate.⁵ We are not yet used to asking: SD by and for whom? Which version?⁶ What is the quality? We also have to imagine and design a new set of easily manageable indicators that reveal individual action and sustainable citizenship. These could be called: the *Individual's Everyday Action in Sustainability Indicators* (IEASI).

The type of indicators for appreciating individual and everyday action in sustainability should include actions such as: the growth and type of environmental complaints, participation in environmental service payments, energy efficiency, transport, train use, bike use, low-impact affordable housing, among others. Indicators which have been identified as showing broader social dimensions for sustainability, highlighting both opportunity and outcome; that illustrate transformations, access to rights and action on responsibilities, those "*eco-social*" indicators which reveal how "*eco-social policies*" are unfolding.⁷

To start considering SD in Costa Rica a key-indicator revealing the quality of SD is the statement by the *Estado de la Nación* report that the environmental "*panorama is confusing and cloudy*".⁸ It is hard to know if people are acting, when it is hard to know the detail through the clouds. Despite this, the everyday environment in Costa Rica is being impacted negatively, and the sustainability of resources and lifestyles questionable. For example, Table 1 shows that: waste production rose over a six year period, (with highs and lows in

⁵ The word *silo-ed* (in the verb form) is introduced here as a needed term for the sustainability field. The idea of knowledge and action to be found in silos of academic, research, professional and policy specializations is introduced by Buckminster Fuller (1969). The noun becomes a verb to stress the necessary action that must be taken to *de-silo* sustainability processes, and the need to integrate and transversalize sustainability in order to avoid the silo effect.

⁶ Here we can talk of the SD spectrum including many positions in regard to what type and how far SD should be implemented; under what terms and for whom? The spectrum runs from light/weak ecological modernity to the stronger forms of de-growth, and deep ecology.

⁷ For example, those identified in the Social Inclusion and the Post-2015 Sustainable Development Agenda (UNRISD 2014).

⁸ Estado de la Nación, *Capítulo 4: Harmonía con la Naturaleza. Informe XIX*. (San José: Programa Estado de la Nación, 2013), 179.

between); per capita energy consumption rose;⁹ energy production increased while renewable energy production dropped; petroleum import expenditure increased.¹⁰ Car, petrol, and private transport use increased, while public transport use decreased.¹¹ Impacting positively on everyday sustainability, we can see that water demand, coverage and quality has increased, but there are more environmental conflict scenarios at a local level due to water contamination issues. We can also see that there has been a growth in the number of environmentally themed street demonstrations, and the number of SINAC received environmental complaints has increased.¹²

Table 1 Indicator	Year / Data ¹³			
Waste production (in San Jose. Grams per person per day)	2008 1,104	2010 1,039	2013 1,390	2014 1,198
Electricity use (Residential consumption per capita - kW/h/per 1000)	2008 735.3	2010 735.5	2013 735.5	2014 736.4
Installed electric energy capacity (kW/h)	2008 2,379	2010 2,746	2013 2,752	2014 2,885
Electric energy generated by renewable sources (percent)	2008 92.6	2010 92.6	2013 87.3	2014 88.9
Petroleum Imports (1,000 US\$)	2008 2,088,835	2010 1,601,050	2013 2,182,436	2014 2,105,751
Car ownership (per 100 people)	2008 25.0	2010 25.6	2013 28.2	2014 29.3
Access to drinking water (percent)	2008 83.4	2010 89.5	2013 92.8	2014 93.0
Population with Access to water quality control (percent)	2008 76.0	2010 78.2	2013 75.5	2014 78.5
Total legal water-wells	2008 14,032	2010 14,476	2013 14,926	2014 15,003
Collective action in relation to environmental conflict	2008 21	2010 39	2013 34	2014 57
Complaints received by SINAC (total)	2008 2,769	2010 2,638	2013 3,972	2014 4,237
Complaints received by SINAC (water)	2008 153	2010 208	2013 106	2014 191
Complaints received by SINAC (wildlife)	2008 482	2010 506	2013 951	2014 865
Complaints received by SINAC (forest)	2008 1,885	2010 1,689	2013 2,622	2014 2,926

⁹ However residential sector energy consumption has been declining in comparison to the industrial sector. Not included in the tables, but can be found in the Estado de la Nacion (2015).

¹⁰ Although there were generally fluctuations during the 2009/2010 period probably related to the global economic crisis period.

¹¹ Marije van Lidth de Jeude and Oliver Schütte, *Gam(ismo): Cultura y Desarrollo Urbano en la Gran Área Metropolitana de Costa Rica*. (San José: Flacso, 2010)

¹² SINAC is the National Conservation Area System.

¹³ All data in tables 1-5 from the publication Estado de la Nacion (2015) unless otherwise stated. A five year observation and research period was also undertaken in Costa Rica by the author for the completion of PhD research fieldwork (2007-2012). That period will also be referred to as one of the peak periods in Costa Rica's policy push to consolidate many of the goals of SD. Research confirmed that it was being implemented weakly and through half-way measures (Temple 2013).

The indicator revealing air contamination is another important IEASI to keep an eye on, and should be in the mix when appreciating how people are reducing impacts, or not. It has dropped over the past few years, and could indicate that more people are opting for less contaminating everyday actions. Costa Rica has introduced actions to reduce fuel costs and air contamination, for example, by introducing car restrictions in downtown San Jose, but this has been evaluated as being unequal in its outcomes, impacting more on lower income groups.¹⁴ Those with more money often opt to drive longer distances or buy second cars to avoid the restrictions, while people from lower income groups are crammed onto heavily contaminating buses. Noise pollution grows, traffic jams and travel times worsen.¹⁵ There are new developments like the cycle lanes in downtown San Jose and Cartago, however hardly anyone uses them, and the majority are very centralized and underdeveloped.¹⁶ The outskirts are underserved, and they have been placed in the most congested pedestrian areas and compete for space. Another indicator, the pioneering Environmental Service Payments, has already been noted as a key eco-social policy category. The total area served has been diminishing over the past few years, but more are being paid to indigenous communities and in the water protection category, however, it is again often the lowest income groups that miss out on the benefits.¹⁷

Table 2 Indicator	Year /Data			
Concentration of PM10 air/San José (Yearly average, mg/m3)	2008 28	2010 28	2013 25	2014 24
Total area under Environmental Service Payments (hectares)	2008 72,217	2010 65,414	2013 66,858	2014 46,449
Area under Environmental Service Payments (Water protection category) (hectares)	2008 1,082	2010 4,654	2013 4,586	2014 4,652
Environmental Payment service land held by Indigenous communities (ha)	2008 12,401	2010 9,050	2013 12,262	2014 12,955

Another important set of IEASIs is the availability of certain products, for example, organic and chemical agro-industrial products. You would think the rise of one would signal the demise of the other, however, over the past few years they both appear to be declining. More study is needed on social inclusion and product availability; however it is easily observable that organic produce is still limited, expensive, and being *silo-ed* into organic farmers markets, rather than integrated effectively and available for all socio-economic groups.

Table 3 Indicator	Year /Data			
Organic Cultivation (percentage of total crop production)	2008 1.8	2010 2.3	2013 1.5	2014 1.6
Pesticide imports (kg of active ingredients)	2008 9,099,982	2010 8,434,564	2013 7,397,896	2014 7,845,987

¹⁴ Osakwe (2010) analyses the impact on national fuel sales and concludes that “differences in the restriction’s effects on sales of regular versus premium gas suggest the measure has distributional effects; there is a larger effect on convenience and budgets of poor drivers.” (p1).

¹⁵ Joselyn Brenes, “¿Cuánto tiempo pasa un tico en las presas?,” *Conozca su Cantón*. May 28, 2016, <https://conozcasucanton.com/noticias/economia/cuanto-tiempo-pasa-un-tico-en-las-presas-486/> (accessed June 15, 2016).

¹⁶ Observed by the author sporadically throughout the months of Feb-July 2016 at different times of the day. Three people were spotted using the cycle lanes after a total of 10 visits.

¹⁷ Ina Porras, *Fair and green? Social Impacts of Payments for Environmental Services in Costa Rica*. London: International Institute for Environment and Development (IIED), 2010.

We also have to understand how many people are being excluded from acting due to economic hardship and lack of opportunities. For example, (Table 4) poverty, extreme poverty, unemployment, concentration of wealth and population density are all growing.

Table 4 Indicator	Year/ Data			
Poverty <i>Do not satisfy basic needs</i>	2008 14.2	2010 15.5	2013 14.3	2014 15.7
Extreme poverty	2008 3.5	2010 5.8	2013 6.4	2014 6.7
Theil Index	2008 0.432	2010 0.419	2013 0.474	2014 0.420
Gini Coefficient	2008 0.485	2010 0.502	2013 0.508	2014 0.515
Distribution of total household income (Bottom 10%)	2008 2.1	2010 1.6	2013 1.3	2014 1.2
Distribution of total household income (Top 10%)	2008 32.9	2010 32.8	2013 34.2	2014 33.1
Population density (per Km2)	2008 86.2	2010 88.7	2013 92.2	2014 93.4
Open unemployment (percent)	2008 4.9	2010 7.3	2013 8.6	2014 8.5

By briefly considering these indicators it can be argued that SD in Costa Rica is not extending throughout society to include broad civil society participation and many are missing out on the opportunities it provides. Everyday lives in Costa Rica seem to be getting more uncomfortable and more insecure. In general Costa Rica is poor in services, poor in facilities, poor in green-lifestyle options, poor in infrastructure, poor in green spaces; green spaces limited and greening processes stuck. Features that are difficult to measure, however are perceived every day, at an everyday level.

There are several reasons why Costa Rica's SD process is stuck and it continues to exclude, or fail, or disinterest the masses: 1) half-way or token measures at a State level (explored previously in Temple 2013); the impacts of lip service, smoke screening, weak sustainability and *silo-ed* SD do not trickle down; the mass of civil society is not involved in SD, or they are only partially involved, for only some of the time; 2) people have been systematically excluded from the process, and availability of support to take action is either non-existent or very hard to access, 3) Costa Rica has a long history of transversalizing Environmental Education (EE) and Education for Sustainable Development (ESD), however people are not being engaged in the 'whys' or the 'hows' of SD. They fail to become active critical thinkers and lack creativity in applying sustainability to everyday living.¹⁸

¹⁸ Although an interesting study by Hidalgo et al (2014) argues that the environmental education process in Costa Rica's rural zones is creating more environmentally friendly behaviour. Similar studies are needed in the urban centres where the majority are living in unsustainable conditions.

Existing Sustainability Steps and Guidance:

The next section briefly introduces ways the individual can find support for sustainability action, and concludes that there is very little available support to individually act on sustainability at an everyday level for ALL.¹⁹ Costa Rica lacks public libraries, so most people (88% of the population) just have online sources to access for advice and guidance on sustainability.²⁰ The world-wide-web offers sustainability examples on the international level, through business strategies, within educational approaches, with public and private sector partnerships, from civil society, non-governmental organisations and communities. The following examples are not exhaustive, but they give us an idea about who is leading the way and provide examples relevant to and directed at stimulating action on an individual level.²¹

Our present day context for sustainability action sits within the broader framework of the UN Sustainable Development Goals and international conventions such as Agenda 21 and the Convention for Biological Diversity. These include strategies, action plans and goal setting. Among the leaders facilitating action is the UN Sustainable Development Solutions Network, stimulating action in education, research and policy.²² There is also the Steps Centre, consolidating steps in sustainability with their conceptual framework of the *STEPS pathways approach* stimulating and supporting action in lower income communities around the world.²³ The Natural Step, one of the most inclusive approaches provides and aims to encourage action in sustainability at all levels, including individual action.²⁴ They state that their *“definition of sustainability is concrete and understandable for everyone. The Natural Step’s approach creates a shared language so that we may work together for effective and desirable change. The processes and tools facilitate action so that we can more quickly achieve true sustainability together.”*²⁵ These frameworks for action have the essential sustainability ingredients, encouraging participatory and inclusive approaches. The 7-SESALLs share and hope to extend their principles.

Other far-reaching top-down initiatives come from the government level.²⁶ Also the variety of steps taken at the business level is reassuring.²⁷ With guidance for every sector, action in

¹⁹ ‘For ALL’ meaning regardless of place, nationality, income, sexuality, gender, chosen-identity, religion, age, ability, or any other status.

²⁰ This according to Cordero (2015) is the highest percentage of the population with access to the internet in the region.

²¹ The major on-line guides, steps and facilitators for sustainability were studied, and out of 70 easily accessible ones there were only a hand-full with some social-inclusion considerations and elements.

²² Especially with their hot-off the press *SDG in Cities Guide*. Produced to stimulate implementation of the SDGs at city level and beyond with its four step strategy: Initiate an inclusive and participatory process; Set the local SDG agenda; Planning for SDG implementation; Monitoring and evaluation (<https://sdgcities.guide/> accessed July 17, 2016).

²³ “The Steps Centre” <http://steps-centre.org/methods/pathways-approach/> (accessed June 2, 2016).

²⁴ With their framework for strategic sustainable development in “The Four System Conditions of a Sustainable Society” revolving around a robust, science-based definition of sustainability (Cook 2004).

²⁵ “The Natural Step” <http://www.thenaturalstep.org/sustainability/the-system-conditions/> (accessed June 21, 2016).

²⁶ For example those that stand out include the New Zealand Government’s 25 Easy steps Toward Sustainability; the Steps to Sustainability: Making Sustainability Your Central Organising Principle from the Welsh Government’s Sustainable Development Charter, and the Costa Rican 2006-2010 Peace with Nature Initiative. All providing stimulus for participation in sustainability on an individual and everyday level.

²⁷ Standing out in the business world is the GreenBiz 12 Steps to Sustainability encouraging businesses to move toward sustainability; the Three Easy Steps to Sustainability from Grace Communications, with steps to support a sustainable food system; The Five Stage Sustainability Journey at Sustainability Advantage; the Smart Steps to Sustainability’s 2.0 Guide published by EPA’s Small Business Office; the 6 Steps to Sustainability from Rotary, supporting sustainable grant funding solutions on how to empower the community to sustain projects. There are also guidelines on sustainability in the engineering sector, the forest sector, the mining sector, Smart Growth Guidelines, sustainable urban development guidelines, sustainable procurement guidelines, environmental

sustainable corporate citizenship, and companies pioneering in responsible business and sustainability, including, Unilever, Walmart, Heineken.²⁸ With *The Unilever Sustainable Living Plan* we can appreciate the type of steps underway.²⁹ Their approach has reached many on the local level. For example, they have helped people improve their hygiene and access to drinking water, with “around 482 million people reached by end 2015 through our programmes on hand-washing, oral health, self-esteem and safe drinking water...”³⁰ Unilever’s goal is to help more than 1 billion people by 2020, however while helping people meet their basic needs is necessary, it is still only part of the puzzle. Many of the Unilever shifts have focused on changing products, or certain aspects of them to create a greener product. Again this is very needed, but when a company tells us that through buying one of their products we can be greener, what happens when we don’t, or if we cannot? When we consider this approach in terms of inclusion, it can polarize instead of unite for sustainability. Polarize between those that buy and those that don’t. Those that don’t being viewed as not doing their part, or not being able to afford to, are marginalised from the greening process of product transformation. Unilever are working with two social groups: 1) those that can buy, and 2) those that are given charity from the products because they cannot buy. They have created a hierarchy through their socio-sustainability approach, not inclusion. Individuals need to be able to get on with greening regardless of the availability, or not, of certain products, and in the absence of the diffusion of existing steps; we need to shift from the focus on creating sustainable consumers and create sustainable citizens.³¹ If we go to the North Western Research Institute’s *Attributes of a Sustainable Citizen* we become clearer about what attributes are needed for this.³² They list dozens. Yet we are still not clear on how to encourage, become and sustain such citizenship.

On a positive note the ISO-14001 environmental management system provides sustainability guidelines and practical steps that are steadily extending throughout the business sector in Costa Rica.³³ The Costa Rican ISO-14001 experience highlights SD guidelines are diverging and converging through the ‘butterfly effect’ and diffusing sustainability.³⁴ The very interesting case of Dos Pinos, the largest dairy-product cooperative in Costa Rica shows that

performance reporting guidelines, guidelines for sustainable cultural tourism in historic towns, guidelines for sustainable aqua-culture, Sustainability Reporting Guidelines with the Global Reporting Initiative, the ILO adopting Guidelines on Sustainable Development, Decent Work and Green Jobs. There is the Sustainability Guidelines for the Singapore MICE Industry (meetings, incentive travel, conferences and exhibitions) industry. There are Sustainable Golf Development Guidelines from the Golf Environmental Organisation (GEO), The Sigma Project, with the British Standards Institution and Forum for the Future, a UK based charity offer guidelines in Putting Sustainable Development into Practice-a Guide for Organisations, The DAC Guidelines Strategies for Sustainable Development, from the OECD, and a guide for Education for Sustainable Development in Botanical Gardens.

²⁸ Marc Gunther, “Sustainability pioneers: who are the trailblazers?” *The Guardian Newspaper*. September 18, 2013, <https://www.theguardian.com/sustainable-business/sustainability-who-are-pioneers-trailblazers> (accessed June 5, 2016).

²⁹ “Unilever Sustainable Living” <https://www.unilever.com/sustainable-living/> (accessed June 18, 2016).

³⁰ Ibid.

³¹ Raz Godelnik, “Forget Sustainable Consumption. Focus on Sustainable Citizenship,” *Triple-Pundit*. November 26, 2013, <http://www.triplepundit.com/2013/11/forget-about-sustainable-consumption-time-move-sustainable-citizenship/#>. (accessed June 22, 2016).

³² “North Western Research Institute” <http://nwri.org/> (accessed June 13 2016).

³³ In 2001, 14 companies were ISO 14001 certified and by 2011 there were 73 (Vindas Quirós 2013). Among them Café de Altura, Holcim, Dos Pinos, Etipres, Prodex, Credomatic. With other companies opting for the C-Neutral (12-01-06:2011), and Reset (06-12-01:2012) certifications (Vindas Quirós 2013). Costa Rica registered 91 companies in 2015 certified in ISO 14001, with a total of 11,595 companies in Latin America (ECLAC 2015). Costa Rica has the most in Central America with Honduras in second place with 35 (Ibid).

³⁴ Matthew Potoski and Aseem Prakash, “Regulatory Convergence in Nongovernmental Regimes? Cross-National Adoption of ISO 14001 Certifications,” *The Journal of Politics* 66, no. 3 (2004).

this method has much potential in stimulating sustainability and has been far-reaching.³⁵ But again it begs the question: is it helping diffuse sustainability? Are individuals encouraged to act? We need further research in Costa Rica to see how much people's lives on an everyday level have been influenced through greening in the business sector, or if the things we do at work are left there at the end of the day. It seems a missed opportunity that 'process' management plans are left to the scope and intentions of the company, rather than having standards which measure individual achievement and involvement in and after work, and throughout the community.³⁶ Businesses could embed a deeper sustainability culture. Another interesting case in Costa Rica in this respect is with the arrival of Walmart. Walmart is applying green practices at a company level and they have programmes which engage their staff with changes at a work and at home.³⁷ However, is being told or encouraged what to do by your boss going to provide long term shifts at an individual level and be truly inclusive? In other words – are people being empowered by the process, or just being told what to do? Again it is out of the scope of this paper to measure that, but it does need further discussion.³⁸ As it stands in Costa Rica, it is hard for workers to question these shifts when one of the largest job providers is in the driving seat. When people have the ideas, the ownership, the desire, and are not just following protocol, then the possibility that the transformation will stick and sustain in practice seems more likely.

Costa Rican public and private sector partnerships are taking successful steps with the Blue Flag Award and the Certification in Sustainable Tourism (CST). These processes encourage opportunities for individuals in the community to get involved by providing specific actions and benchmarks in the management system for participation. On one hand, few of the people involved appear to have a clear understanding of the sustainable principles, goals and actions of the process; sustainability is often *silo-ed* to the management or administrative levels, is not extended and diffused throughout the company, and mostly fails to encourage individual empowerment and action. On the other hand, these initiatives encourage business and industry to shift toward sustainability by engaging with local people for some of the integrated steps that the programme demands. For example, the Blue Flag can be adopted by communities, schools, and universities, with plenty of potential for action on and individual level. It is also encouraging that the Blue Flag Award and the CST have been growing in Costa Rica (Table 5).³⁹

Table 5 Indicator	Year / Data			
Blue Flag Award Beaches	2008 63	2010 67	2013 107	2014 130
Certification in Sustainable Tourism	2008 98	2010 183	2013 303	2014 321

³⁵ For example, their work in prisons, up-cycling waste, and having the first aluminium carton recycling unit in the region. "Dos Pinos" http://www.dospinos.com/app/cms/www/?id_menu=39&parent_id_menu=3 (accessed July 20, 2016).

³⁶ As discussed through differentiating between process and performance certification in Martha Honey, ed., *Ecotourism and Certification: Setting Standards in Practice* (Chicago: Island Press, 2002).

³⁷ Walmart, *Walmart Global Responsibility Report*, <http://corporate.walmart.com/global-responsibility/global-responsibility-report> (accessed June 10, 2016).

³⁸ Walmart has been widely criticised for its green-washing processes, for example, see Mitchell (2012).

³⁹ The Blue Flag Award and the Certification for Sustainable Tourism are among the most widely used certifications in Costa Rica and engage communities, schools, education facilities, beaches, and churches, and hotels in environmental management and action.

It is encouraging that steps for sustainability for individuals are available when searched on-line.⁴⁰ Yet they are mostly group-identity specific. Therefore an important framework for engaging communities to act is the previously mentioned Agenda 21 (A21), adopted on a global level and being diffused since the 1992 Rio environmental World Summit. Costa Rica is one of the signatories and serves as the Seat of the Earth Council.⁴¹ Yet it is very hard to measure to what extent the A21 has been diffusing through institutions and stimulating steps in sustainability. Over a twenty year period (1992-2012) it was being said among the environmental community that very little action in A21 had been implemented.⁴² The A21 not getting off the ground in Costa Rica could again indicate that action is lacking and sustainability stuck.⁴³ Reinforcing action plans, such as A21, is urgently needed, but we need to follow through with the creation of simple tools and mechanisms that can be tailored, easy to apply, flexible and relevant, that permeate our everyday lives and engage us in action. The 7-SESALL approach contemplates that we can sit quite comfortably within a framework/plan and not act. If we are given the tools we might act, if we are given instructions we might understand how to act, if we are given the knowledge we might understand the need to act, but, if we personally create and define the knowledge, i.e. it is about us, our ecosystems, communities and ideas, we probably will act.

Therefore, one last indicator worth considering in a discussion on everyday sustainability action is the transversalising process of EE and ESD.⁴⁴ Table 6 shows key developments and that Costa Rica has a long history in transversalising sustainability. This does not necessarily mean however that it has resulted in changing behaviour at an individual level; transversalising sustainability principles does not necessarily add-up to sustainability action. The question must shift from: do the steps and encouragement exist? To: are they adding up to action? Transversalising sustainability principles does not necessarily mean that we are transversalising the desire to act upon them. Exposing the need to design, develop and keep improving tools for transversalising sustainability, such as the 7-SESALLs. Future research into sustainability should examine the transversalising mechanism and its role in stimulating action.

⁴⁰ Those easily accessible on the internet include the film industry with The End of the Line and their action plan '3 Steps to Sustainability' for responsible seafood consumption encouraging their audiences to take action; There are sustainable steps being taken as part of the 2016 Buddhist Action Month where UK Triratna Buddhist Centres are transforming into sustainable spaces with an "easy-to-implement 10-step guide to making it happen". The United Methodist Women promoting 13 Steps to Sustainability. Motivating domestic and individual action include: *How Green are my Wellies: Small Steps and Giant leaps to Green Living with Style* by Anna Shepard; A New Beginning with Six Sustainable Steps to Sustainability by Greg Seaman on the blog, Eartheasy Solutions for Sustainable Living; the blog *steps2sustainability* claiming to be at the "crossroads of environmental action, sustainability and faith"; The Catholic Leadership Centre in East Melbourne with their 'The Steps to Sustainability conference for teachers and educators in 2016; The University of Sussex hosting the International Sustainability Transformations Conference organised by the Sustainability Transformations Research Network; The *Sustainable Baby Steps website* with many tips for green living, and with the appropriate notion of taking baby steps in sustainability action, for example with their *7 Day Treehuger Kickstart*.

⁴¹ Which according to Maurice Strong this would make SD more active in Central America, especially with Costa Rica's firm support for the Central American Alliance for Sustainable Development. This alliance was the first of its kind in the world (Strong 2000).

⁴² Helen Temple, *The Peace With Nature Initiative: The Oscar Arias Sanchez Presidential Administration. 2006-2010*. (London: University of London, 2013).

⁴³ According to Polimeli (in Temple 2013) the only case successfully implementing the A21 framework for action was identified as the *Osa Peninsula Dialogues*, which implemented a participatory approach to establish an agenda for local sustainable development.

⁴⁴ Mata Ferreto (2013) describes that active and responsible participation and compromise in environmental projects is being encouraged through Costa Rica's transversalising EE and ESD processes (p23).

Table 6: Transversalising EE/ESD in Costa Rica.

1977	Costa Rica started state funded formal educational sector environmental education topics.
1980s	Since 1980s Costa Rica has been one of leaders in efforts to promote environmental learning with a three-fold national development policy that promotes education, conservation and ecotourism. ⁴⁵
1987:	Costa Rica publishes its first national 'Environmental Education Master Plan'
1993:	Costa Rica introduces an Office of Environmental Education as a separate division of MEP – promoting application of transversal themes by 2002.
1994	The national education policy "Política Educativa hacia el Siglo XXI" established with the central objective to convert education into a central axis for sustainable development. ⁴⁶
2000:	Costa Rica opens The Instituto Nacional de Biodiversidad (InBio) – an environmental educational facility, research centre and ecosystem park. Stimulating community parataxonomists and community participation. ⁴⁷
2002:	Costa Rica starts global environmental thinking and strategies with a 'sister school' experiment with the USA. The Office for EE continues consolidating promotion of transversal themes.
2003:	Four of Costa Rica's secondary state schools offer ecotourism as a specialization and two more offer environmental studies.
2004	Executive Decree N° 32001 – MEP: "Estrategia Nacional para la Educación Ambiental en I y II ciclo de la Educación General Básica, ENEA 2005 – 2008" places 'Environmental Culture for Sustainable Development' as one of its four main transversal academic themes. ⁴⁸
2006	The first regional consultation for the UN Decade for ESD took place in San Jose. (Earth Charter Initiative /UNESCO).
2006	The Oscar Arias administration 2006-2010 established the Peace with Nature initiative which started the formal institutional process of the greening of the public sector. Since this date all public entities, including the educational sector have been legally obliged to transversalize sustainability through processes and activities.
2010	The REDIES group of universities makes the commitment to transversalize sustainability through their institutions, courses and activities.
2010	2010, introduction of law N° 8839: "Ley de Gestión Integral de Residuos Sólidos" Article 19 states that National Education Plan is to transversalize the necessary themes to create understanding, values, actions to support this waste management law. ⁴⁹
2010	SINAC's 2010 – 2015 Strategic Plan recognises Environmental Education as a transversal institutional theme. ⁵⁰
2011	The National Apprentice Institute (INA) and The National Technical University (UTN) in their Institutional Strategic Development Plans 2011-2021, establish social responsibility and environmental commitment as transversal themes throughout institutional and academic processes. ⁵¹
2015	Rene Castro (ex-minister of the environment) talks of the need to transversalize for SD. ⁵²
2015	Transversalising climate change themes seen as underway and vital contributions in the preparation for the agricultural and environmental sectors contributions to COP21. ⁵³
2016	Universidad Veritas 'steps-up' commitment to transversalize sustainability principles and awareness of the SDGs through their courses at the Centre for International Programs. The 7-SESALLs pilot study started.

⁴⁵ Nicole Blum, "Environmental education in Costa Rica: building a framework for sustainable development?" *International Journal of Educational Development*, 28, no.3 (2008).

⁴⁶ Ana Virginia Mata Ferreto, *Informe Tema: Educación Ambiental en Costa Rica*. (San José: JICA, 2013).

⁴⁷ Nicole Blum, "Environmental education in Costa Rica: building a framework for sustainable development?"

⁴⁸ Along with health, sex education, and human rights' for peace and democracy (Mata Ferreto 2013).

⁴⁹ Mata Ferreto, *Informe Tema: Educación Ambiental en Costa Rica*.

⁵⁰ Ibid.

⁵¹ Ibid.

⁵² At the inauguration of the first Sustainable Construction Post-graduate course at Universidad Veritas (launched in 2015).

⁵³ Eduardo Villagra Araya and Bryan Rojas Madrigal, *Informe del taller regional "Agricultura, Ambiente y Cambio climático: Perspectiva de América Central con vista a la COP21"* (San José: Universidad de Costa Rica, 2015).

Leading the way in transversalising sustainability in Costa Rica is Earth University, CATIE, UPAZ, and INCAE, with firm participatory approaches providing academic stimulus and diffusion that encourage individual shifts. Universidad Veritas has committed to the transversalising of SD principles throughout its courses and activities, thus providing additional progress and leadership. Academic institutions, both public and private come together to lead on sustainability action with the REDIES initiative.⁵⁴ The British Embassy has also been one of the lead institutions taking steps to implement sustainability in San Jose and throughout Central America. They have been working systematically for nearly a decade on transversalizing sustainability throughout their activities, partnerships with government, universities, institutions and working with children to encourage action and participation. “*Yo Pienso Verde*” is another Costa Rican example focusing on stimulating action. By 2016 it claims to have trained a total of 1,400 teachers, administrative professionals and thousands of students in green thinking.⁵⁵

The above examples show steps are being taken and several sustainability paths already in place, however, overall it was found that there was very little support for sustainability at an individual and everyday level. The guides and steps are plentiful and necessary, but they are *silo-ed*, sectoral, stuck and lack a universal vision. The question again moves from: do they exist? to, are they diffusing and inclusive? Are people getting their hands on the guides? Are they being guided? The 7-SESALLs hopefully help demand that easy-access, all-encompassing and universally-applicable steps for sustainability need to be designed, acted on, and accompanied by measurable IEASI sets.

The 7-SESALLs:

Waiting to be transversalised upon and our institutions and policy to miraculously line up to provide sustainable solutions and strategies is like waiting around to eat healthily when we already know that we must. People cannot wait for ‘greening’ to trickle down. We have more than the sustainability basics, so let’s now get people pushing to act. We need to live sustainably and much of that will be through trial and error and seeing what fits best. We already have lots of recipes, but they seem to mostly be for institutions, business, moneyed people, the middle classes, or alternative lifestyles, i.e., those living already with plenty or those already living on the edges.⁵⁶ Or put another way, those able to participate in the greening process and those doing it regardless. Most of us do not fit into these camps, or more importantly most of us do not fit into these camps all of the time. So we make up the 80% doing little, to nothing, falling through the sustainability gaps rather easily. Comparable perhaps to the medical doctor going off for a sneaky cigarette, but worse, much worse, because people are hardly critiqued when they leave green spaces; out of low impact to high impact lifestyles. It would be nice if we were at least being sneaky about it, because then it might mean we are a little ashamed, self-critiquing, but instead its blatant denial, disregard, disconnect. So, what types of tools to shift this shamelessly unsustainable context are needed? People need constant reminding and repetition of the need to act sustainably. Like

⁵⁴ Which includes a grouping of public and private universities, including UCR, UNA, INA, UCI, UPaz, Earth, CATIE, UVeritas, INCAE, UNIBE, Ulatina, ULACIT.

⁵⁵ “Sociedad de Seguros de Vida del Magisterio Nacional” <http://www.segurosdelmagisterio.com/intro.htm>

⁵⁶ Van Lidth de Jeude and Schütte (2010) identify the ‘Kula’ subculture in Costa Rica made up of those that practice yoga, are health conscious, spiritual and caring for the environment. We can add that this is made up of the upper-middle class, middle class and ex-pat communities.

the reminder ‘5 a day’ the 7-SESALLs must be repeated until sustainability sticks at an everyday level.⁵⁷

Opening a description of the 7-SESALLs certain points can be highlighted to justify their need:

Box 1: Justifying the Development of Transversalising Tools for Sustainability	
1.	Sustainability is stuck and silo-ed in certain sectors. This creates sustainability guards – people protecting sustainability ‘added value’ and knowledge rather than filtering and integrating sustainability at every chance.
2.	The sustainability process thus far is slow and exclusive; it is getting co-opted and diluted. It needs to be stepped-up.
3.	Community leaders and teachers (sustainability guides) are struggling with the definition of sustainability – people are reluctant to transversalize what they do not really understand. Their reluctance helps silo sustainability.
4.	Basic sustainability <i>principles and pushers</i> are missing. The sustainability gaps are vast. Action is weak.
5.	Society lacks tools for sustainability action.
6.	Sustainability guides lack transversalising tools and capabilities.
7.	There is a lack of understanding that we have both a responsibility to act, and a right to act on sustainability.
8.	We must replace the sustainability guards with sustainability guides and nature guardians.
9.	Everyone needs to be empowered by their own sustainability story – differentiated diagnosis techniques are appropriate at an individual level for achieving this.
10.	More inclusive platforms for sustainability sharing are needed, along with more support to get everyone acting for everyday change.

The 7-SESALLs are in the very early stages of development, but they are urgently needed, or something similar and more appropriate.⁵⁸ The 7-SESALLs, or similar steps for sustainability are needed due to people being disconnected from their ecologies and communities, nature illiterate, unable to identify their sustainability rights and responsibilities (where human rights and environmental rights converge), development paradigm illiterate, and therefore unable to act. The 7-SESALLs are a tool for working within the socially transformative and transgressive learning for sustainability approach.⁵⁹ They can be identified more specifically as a tool for the transformative, transgressive learning process influenced by critical phenomenology as described by Zumdick.⁶⁰ He described “our world

⁵⁷ ‘5 a Day’ refers to the slogan used for the recommended 5 portions of fruit and vegetables needed for a healthy diet.

⁵⁸ This process must be open to discussion, be based on deliberative processes that engage individuals and communities in consensus building exercises, and identify the steps people themselves feel they need to take to become more sustainable at an everyday level.

⁵⁹ As outlined by Lotz-Sisitka et al (2015).

⁶⁰ Zumdick (2011) in Lotz-Sisitka et al., “Transformative, Transgressive Social Learning: Rethinking Higher Education Pedagogy in Times of Systemic Global Dysfunction” *Current Opinion in Environmental Sustainability*, 2015.

today as a huge laboratory, where millions of people are looking for new forms of living, new forms of participation, new materials, and new techniques".⁶¹ He imagines a type of social laboratory where our inner abilities and potentialities of *Imagination, Inspiration and Intuition* are investigated, our relationship and responses to the outer-world enhanced, and sustainable futures developed.⁶²

The 7-SESALLs do not sit alone nor exist in a vacuum. By nature they cannot be silo-ed. They demand connections and build upon certain previous well trodden ground. They accept the Nature-Deficit Disorder we have acquired (see Louv 2008). They nod to and need to complement such approaches as The *Coyote* approach for reconnecting with nature.⁶³ These works serve as musts for the guides that adopt and extend sustainability steps. The 7-SESALLs walk upon the classic sustainability paths laid by Fritjof Capra.⁶⁴ They embed Max Neef's fundamental human needs, and feed off the incredible innovations of sustainability practice, such as Nalini Nadkarni's *Life Science Prison* project for creating new citizen scientists, and expanding caring communities for the environment.⁶⁵ They embed the notion of *differentiated diagnosing* sustainability, and demand it on an individual level. They follow recipes from *Kitchen Table Sustainability*,⁶⁶ and from the Sustainability Steps Centre approach that "*recognises that who you are shapes how you 'frame' – or understand – a system... Those various framings will lead to different narratives being told about the same system and different choices being made*".⁶⁷ And they support Melissa Leach talking of the '*plurality of pathways*' that must be included to understand the complete sustainability scenario and move us toward sustainable solutions.⁶⁸ They encourage people to go ahead and start building, exploring their own path, which can then be ready to be included in broader processes for sustainability; creating the space for individual framing and a diversity of narratives in sustainability to be accounted for, to count, for small individual everyday acts to add-up. They recognise that previous approaches can fragment and be very target group specific. Still the 7-SESALL tool does not replace these, they grow from them. They aim to support sustainability advancing and converging, help consolidate sustainability ideals, principles, and expand their coverage. The 7-SESALL approach adds to previous pathway approaches striving for "*multiple green transformations which are required if humanity is to live sustainably on planet earth*".⁶⁹ The 7-SESALLs support that "*Green transformations must be both 'top-down', involving elite alliances between states and business, but also 'bottom-up' pushed by grassroots innovators, and entrepreneurs and part of wider mobilizations among civil society*".⁷⁰ The 7-SESALL tool is not only for transversalizing sustainability for transformation, a tool to enable action at an individual level, it also helps us understand that social inclusion for sustainability has to shift slightly - not just to include the economically poor - but also those who are poor in sustainability options, illiterate in sustainability basics; those being systematically blocked from taking sustainability action, whilst the increasing degradation of their opportunities, livelihoods, resources, safety, health and wellbeing continues. The 7-SESALLs call for a surge in sustainability, stepping-up

⁶¹ Ibid., 76.

⁶² Ibid.

⁶³ Jon Young et al., *Coyote's Guide to Connecting with Nature*. (Santa Cruz: OWLink Media, 2010).

⁶⁴ Fritjof Capra, "Development and Sustainability," *Center for Ecoliteracy*. 2005, www.ecoliteracy.org (accessed July 15, 2016).

⁶⁵ Nalini Nadkarni, "The Moss in Prison Project: Disseminating Science Beyond Academia." *Frontiers in Ecology and Environment. The Ecological Society of America* 4, no. 8 (2006).

⁶⁶ See Sarkissian et al (2009).

⁶⁷ "The Steps Centre" <http://steps-centre.org/methods/pathways-approach/> (accessed June 22, 2016).

⁶⁸ Director of the Institute of Development Studies (IDS) collaborating with the STEPS Centre (Leach and Newell 2015).

⁶⁹ Ian Scoones et al, *The Politics of Green Transformations*. (London: Routledge, 2015): xiii

⁷⁰ Ibid., xiii.

creativity for ways to combat environmental degradation and empower people to take action in the absence of support, systems, or diffusion of shifts. The 7-SESALLs are needed as Wals and Lenglet state “*there appears to be a growing consensus that sustainability is ultimately about the interplay between people and ecologies*” and in their search for sustainability citizens they explore methods and approaches that “*allow citizens to learn not just about ‘matters of fact’ but to make these facts, and the sustainability issues of which they are part, into matters of public concern and deliberation, leading to collaborative learning and even collective action. In so doing, they help to (re-)establish and (re-)vitalise substantive citizen rights.*”⁷¹

Box 2:	<p>The Seven Steps for Everyday Sustainability for All (7-SESALLs) Sustainability Empowerment and Social Inclusion: A Transversalizing Tool (abbreviated version)⁷²</p>
<p>A guide in educating and acting for social inclusion in sustainability. Directed at individuals, institutions, communities and companies, groups and guides.</p>	
<p>STEPS to Sustainability Action and Citizenship:</p> <p>1: Reconnect with your rightful place in your ecosystem: know what species you share your space with. Have at least ten of your closest surrounding species known to you (then keep adding more and finding out more about each one).</p> <p>2. Monitor and observe your surroundings: - keep an eye on the different creatures and species that you have previously identified. Become ecosystems monitors – foresteers.⁷³ Expand your notion of community, to include ecosystem community care.</p> <p>3. Learn and embrace your human rights and environmental rights: - every one of them. Not that hard (easier than the multiplication-times table); there are 30 basic universal human rights to learn and a hand full of fundamental environmental rights.</p> <p>4. Identify human rights’ vulnerabilities and strengths: identify which of your environmental- human rights, and of those around you, are being undermined and need strengthening.</p> <p>5. Learn The 9 Basic Human Development Needs: - Identify which of yours are not being fulfilled and those of the people around you.</p> <p>6. Know your environmental footprints: Know as many of your environmental footprints (ecological, carbon, water etc.) as possible and keep monitoring them. Try to think how you could reduce your footprints and start to act on your ideas. Think about every footprint you make/every foot-step you take being green, low-impact or regenerating.</p> <p>7. Identify your economic development context: Connect with your economic context and identify its potential and limits. Know the different development paradigms/ economic contexts of your global community and home country. Identify those travelled through historically and the one we are in now. Simply name them, find differentiating features, realise how they shape, support and limit us.</p> <p>Next step (which is called the taking the Forever Step in Sustainability): Keep thinking in <i>Simple Sustainability</i> terms = practical every day and personal ways to take action to protect yourselves, your families, your communities, your ecosystems, your planet and live in a healthy, happy, balanced and better system. Keep growing these steps, your steps, and creating more.</p> <p>Ask yourself - What would be and should be that first green step? which step will be taken next? What environmentally friendly features do you want to have around you and become part of? How will you make them your own? How will this help your ecosystem? How will it make things better?</p>	

⁷¹ Arjen Wahls and Frans Lenglet. “Chapter 5, Sustainability Citizens: Collaborative and Disruptive Social Learning,” in *Sustainability Citizenship in Cities: Theory and Practice*, eds. Ralph Horne et al (London: Routledge, 2016) 52-53.

⁷² An extended version of the 7-SESALLS with a simple action plan can be found in Annex 1.

⁷³ The term *Foresteer* refers to someone who acts or/and identifies as a forest guardian; someone looking out for, looking after and monitoring the forests.

The 7-SESALLs are beginner's steps for sustainability and critical thinking about our sustainability context. But they are not limited in their scope. From taking the first few simple steps in sustainability, miles could eventually be covered. They consider that we need sustainability not to exclude from the outset, but to entice, interest and involve all. We want it not to be above and beyond people, possible to opt in or out of (according to availability, mood or price), but relevant, flexible and personable, with the idea that each and every one of us can make our own version of sustainability; people discovering the need for sustainability on their own, and identifying the version important for them as they embed themselves into their ecosystems, local landscapes and the social issues around them.

We cannot apply sustainability without the tools. The 7-SESALL is a tool for education for action in sustainability, sustainability citizenship, re-connecting with eco-social-systems, embedding sustainability principles, transversalising sustainability. The capabilities developed by the 7-SESALL tool are: 1) critical thinking, 2) exploration and creativity, 3) the chance to act cheaply or according to our means. The 7-SESALLs are bottom-up applicable and as inclusive as possible. It is hoped that through practicing them citizens will become caring, concerned and creative individuals with authentic connections to community and ecosystems. Synthesising what has previously been identified as fundamental for EE and ESD, the seven steps hopefully add-up to the seven sustainability 'C' states for sustainability citizenship, where sustainability Curious, Connected, Critical, Conscious, Creative, Carers and Citizens can be formed. Citizens who are conscious of the slippery nature of sustainability and the 'wicked issues' within sustainability, can identify them, can respond to them, develop approaches that apply to their immediate self, space, society and systems.⁷⁴

To conclude sustainability is stuck.⁷⁵ Sustainability is at best moving very slowly for everyone, at worst, only providing positive outcomes for a few. It is time to target individual responsibility, however there is little guidance for individual action. We have certain sub-cultures, trends and shifts, however these are sectoral and *silo-ed* in and by the State, institutions, business and classes. With few existing action tools for sustainability, it is argued that guidance for individuals has to be stepped-up and reinforced, along with the principle of inclusion and sustainability for ALL. We have had attempts with the emerging development of transversalising sustainability through educational processes, however the transversalising of basic SD principles is weak; the transversalization process has failed to get people, and more importantly, keep people acting. As sustainability stands, everyday people are leaving things up to other sectors, some unable to act, others unaware how to. In the absence of guidance and addressing these gaps, the *7-Steps for Everyday Sustainability for ALL* are proposed.⁷⁶ If we can ALL imagine and design a better 7-SESALL tool, we will ALL be the better for it.

⁷⁴ See Wahls and Lenglet (2016) for a discussion of 'wicked issues' and sustainability.

⁷⁵ When the term 'stuck' is used it refers to the SD process not trickling down, not adding-up to mass action, and not being inclusive.

⁷⁶ The 7-SESALLs are awaiting further application, need vigorous praxis and subsequent research. Within the short term future of the 7-SESALLs it is planned that they will be discussed, developed and applied as one of the tools for transversalising sustainability among staff and community of the new Veritas University Sustainability Centre. Here it is hoped that they can provide a tool for participatory action to enable individuals to become embedded sustainability citizens, supporting the sustainability, and enhancing empowerment and involvement for all.

Bibliography

- Barkemeyer, R., Holt, D., Preuss, L. and Tsang, “What happened to the development in ‘sustainable development’?” *Sustainable Development*, 22, no.1 (2014): 15-32,
- Blum, Nicole. “Environmental education in Costa Rica: building a framework for sustainable development?” *International Journal of Educational Development* 28, no.3 (2008): 348-358.
- Brenes, Joselyn. “¿Cuánto tiempo pasa un tico en las presas?” *Conozca su Cantón*, May 28, 2016. <https://conozcasucanton.com/noticias/economia/cuanto-tiempo-pasa-un-tico-en-las-presas-486/> (accessed June 15, 2016).
- Buckminster Fuller, R. *Operating Manual for Spaceship Earth*. Carbondale: Southern Illinois University Press, 1969.
- Capra, Fritjof. “Development and Sustainability,” *Center for Ecoliteracy*. 2005, www.ecoliteracy.org (accessed July 15, 2016).
- Cook, David. *The Natural Step: Toward A Sustainable Society. The Schumacher Briefings. no.11*. Totnes, Devon: Green Books, 2004.
- Cordero, Carlos. “País destaca en su calificación de acceso a la Web, pero baja en infraestructura.” *El Financiero*, June, 29, 2015.
- Economic Commission for Latin America and the Caribbean (ECLAC). *Statistical Yearbook of Latin America and the Caribbean, 2015 (LC/G.2656-P)*. Santiago: ECLAC, 2015.
- Estado de la Nación. *Capítulo 4: Harmonía con la Naturaleza. Informe XIX*. San José: Programa Estado de la Nación, 2013.
- Estado de la Nación. *Capítulo 4: Harmonía con la Naturaleza. Informe XXI*. San José: Programa Estado de la Nación, 2015.
- Fallas Villalobos, Cristina. “Cinco pasos para aplicar los Objetivos de Desarrollo Sostenible.” *El Financiero*, Junio, 18, 2016.
- Godelnik, Raz. “Forget Sustainable Consumption. Focus on Sustainable Citizenship,” *Triple-Pundit*. November 26, 2013, <http://www.triplepundit.com/2013/11/forget-about-sustainable-consumption-time-move-sustainable-citizenship/#> (accessed June 22, 2016).
- Gunther, Marc. “Sustainability pioneers: who are the trailblazers?” *The Guardian Newspaper*. September 18, 2013, <https://www.theguardian.com/sustainable-business/sustainability-who-are-pioneers-trailblazers> (accessed June 5, 2016).
- Hidalgo, K. Sandí, J. and Cruz, S. “El Impacto De La Educación Ambiental En Zonas Rurales De Costa Rica.” *Congreso Iberoamericano de Ciencia, Tecnología, Innovación y Educación*, Artículo 653, 2014.
- Honey, Martha (ed), *Ecotourism and Certification: Setting Standards In Practice* (Chicago: Island Press, 2002).
- Leach, Melissa and Peter Newell, eds. *The Politics of Green Transformations (Pathways to Sustainability)*. New York: Routledge, 2015.

Lotz-Sisitka, Heila, Arjen EJ Wals, David Kronlid and Dylan McGarry “Transformative, Transgressive Social Learning: Rethinking Higher Education Pedagogy in Times of Systemic Global Dysfunction” *Current Opinion in Environmental Sustainability* (2015).

Louv, Richard. *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder*. North Carolina: Algonquin Paperbacks, 2008.

Mitchell, Stacy. “Walmart’s Greenwash How the company’s much-publicized sustainability campaign falls short, while its relentless growth devastates the environment.” *Institute for Local Self Reliance*. March 2012.

North Western Research Institute. *North Western Research Institute’s Attributes of a Sustainable Citizen*. from <http://nwri.org/2011/07/attributes-of-a-sustainable-citizen/> (accessed July 20, 2016).

Monbiot, George. *Heat*. London: Penguin Press, 2006.

Nadkarni, Nalini. “The Moss in Prison Project: Disseminating Science Beyond Academia.” *Frontiers in Ecology and Environment. The Ecological Society of America* 4, no. 8 (2006).

Osakwe, Rebecca. *An analysis of the driving restriction implemented in San José, Costa Rica*. San José: CATIE/EfD Policy Brief, June 2010.

Porras, Ina. *Fair and green? Social Impacts of Payments for Environmental Services in Costa Rica*. London: International Institute for Environment and Development (IIED), 2010.

Potoski, Matthew, and Aseem Prakash. “Regulatory Convergence in Nongovernmental Regimes? Cross-National Adoption of ISO 14001 Certifications,” *The Journal of Politics* 66, no. 3 (2004): 885–905.

Rowe, Anthea. “Ten Steps to Sustainable Business in 2013.” *The Ivy Business Journal* January / February 2013.

Sachs, Jeffrey. *The End of Poverty.*, London: Penguin Press, 2005.

Sachs, Jeffrey. *The Age of Sustainable Development*. New York: Columbia University Press, 2015.

Sarkissian, Wendy, Nancy Hofer, Yollana Shore, Steph Vadja, and Cathy Wilkinson. *Kitchen Table Sustainability: Practical Recipes for Community Engagement with Sustainability*. London: Earthscan, 2009.

Scoones, Ian, Melissa Leach, and Peter Newell, *The Politics of Green Transformations*. London: Routledge, 2015.

Shepard, Anna. *How Green are my Wellies: Small Steps and Giant leaps to Green Living with Style*. London: Transworld Publishers, 2009.

Strong, Maurice. *Where on Earth are we going?* New York: Texere LLC, 2000.

Temple, Helen. *The Peace With Nature Initiative: The Oscar Arias Sanchez Presidential Administration. 2006-2010*. London: Unpublished Thesis, Birkbeck College, University of London, 2013.

UNRISD. *Social Inclusion and the Post-2015 Sustainable Development Agenda*. United Nations, 2014.

Van Lidth de Jeude, Marije, and Oliver Schütte, *Gam(ismo): Cultura y Desarrollo Urbano en la Gran Área Metropolitana de Costa Rica*. San José: Flacso, 2010.

Villagra Araya, Eduardo, and Bryan Rojas Madrigal. *Informe del taller regional "Agricultura, Ambiente y Cambio climático: Perspectiva de América Central con vista a la COP21."* San José: Universidad de Costa Rica, 2015.

Vindas Quirós, L. "Normativa Ambiental Gana Aceptación Entre Empresas Ticas." *El Financiero*, January 27, 2013.

Walmart. *Walmart Global Responsibility Report*. <http://corporate.walmart.com/global-responsibility/global-responsibility-report> (accessed June 10, 2016).

Wahls, Arjen and Frans Lenglet. "Chapter 5, Sustainability Citizens: Collaborative and Disruptive Social Learning," in *Sustainability Citizenship in Cities: Theory and Practice*, edited by Ralph Horne et al. London: Routledge, 2016. 52-53.

Annex 1: The Seven Steps for Everyday Sustainability for All 7-SESALL: Action Version

A guide in educating and acting for social inclusion in sustainability; A tool for transversalizing sustainability and stimulating sustainability action. Directed at individuals, institutions, communities and companies, groups and guides. Devised and developed by H.J. Temple PhD. Universidad Veritas.

STEPS to Sustainability Action and Citizenship:

- 1: **Reconnect with your rightful place in your ecosystem:** know what species you share your space with. Have at least ten of your closest surrounding species known to you (then keep adding more and finding out more about each one). **Action:** make a list of at least ten species in your neighbourhood find out as much about them as you can.
2. **Monitor and observe your surroundings:** - keep an eye on the different creatures and species that you have previously identified. Become ecosystems monitors and foresteers. Expand your notion of community, to include ecosystem community care. **Action:** find if any there are any endangered species near you and find out what's happening to them.
3. **Learn and embrace your human rights and environmental rights:** – every one of them. It is not that hard; there are 30 basic universal human rights to learn and only a hand full of fundamental environmental rights. **Action:** learn as many of your basic universal human rights as possible and list your basic environmental rights.
4. **Identify human rights' vulnerabilities and strengths:** identify which of your human and environmental rights, and of those around you, are being undermined and need strengthening. **Action:** make a list of the most concerning human and environmental problems in your neighbourhood and find out where you should go for advice if your human rights are undermined.
5. **Learn the 9 Basic Human Development Needs:** - Identify which of yours are not being fulfilled and those of the people around you. **Action:** ask others, see what they say.
6. **Know your environmental footprints:** Know as many of your environmental footprints (ecological, carbon, water etc.) as possible and keep monitoring them. Try to think how you could reduce your footprints and start to act on your ideas. Think about every footprint you make/every foot-step you take, being green, low-impact or regenerating. **Action:** identify your footprints and think of seven ways to reduce your negative impacts.
7. **Identify your economic development context:** Know the different development paradigms/ economic contexts of your global community and home country. Identify those travelled through historically and the one we are in now (for example, pre-Columbian, colonial, neoliberal). Simply name them and try to find differentiating features. **Action:** Think of projects that could be established in your community to help improve the survival of the ecosystems, species and people around you. Imagine where the money would come from and how much would be needed to maintain the project. Guiding question: What projects would you like to see take shape and what do you think stands in their way?

Next step (which is called the taking the Forever Step in Sustainability): Keep thinking in *Simple Sustainability* terms = practical every day and personal ways to take action to protect yourselves, your families, your communities, your ecosystems, your planet and live in a healthy, happy, balanced and better system. Keep growing these steps, keep adding to them, develop and create your own steps. Keep asking yourself – what will be my next green step? and when will I take it?