



Sustainable development in Sweden

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Abstract

The paper shows the relationship between sustainability and sustainable development with Sweden as the country of interest. The paper finds that each region of the world has made some progress towards achieving high levels of sustainable development; however, each region also faces unique challenges that affect the attainment of the sustainable development goals in the region. These challenges have social, political, structural, institutional and economic dimensions. Also, while sustainable development is a widely acknowledged concept in academia its practicality in policy circles has been contested. Existing empirical studies show that incorporating sustainability or sustainable development concerns into business or environmental management yields some positive benefits.

Keywords: environment, sustainable development, sustainable development goals, economic sustainability, environmental sustainability, social sustainability, human system

Introduction

Over the past few years, “Sustainable Development” (SD) has emerged as the latest development catchphrase. At the turn of the millennium, the world's political leadership adopted sustainable development as a leading model for societal development. A wide range of nongovernmental as well as governmental organizations has embraced it as the new paradigm of development. However, the terms "sustainable development", "sustainability" and "sustainable" are sometimes over- and misused despite wide consensus about the concept's meaning among sustainability scholars and practitioners. While the concept allows various sustainability views to co-exist, random conceptualizations which do not respect the fundamental sustainability principles undermine the concept's objective to steer action. This lack of understanding of sustainability arguably inhibits its practical realization and a proper understanding of sustainability is urgently needed. In this paper, I aim to contribute to a better understanding of sustainability by adopting a bird's eye perspective.

The environment is one of the basic public assets of a human system, and it must be therefore specially protected. According to our present knowledge, sustainability is necessary for all human systems and it is necessary to invoke the sustainable development principles in all human system assets. Sustainable development is understood as a development that does not erode ecological, social or political systems on which it depends, but it explicitly approves ecological limitation under the economic activity frame and it has full comprehension for support of human needs.

The World Commission on Environment and Development popularized the concept of Sustainable Development in 1987. Sweden is known for its undeveloped wilderness and archipelagoes, stretching from the European mainland to the Arctic. Meeting the environmental challenges of the future is not just about protecting landscapes, though; Sweden is making big strides towards safeguarding the future and conserving the past. The government adopted Sweden's Action Plan for the 2030 Agenda with the intention of

reinforcing efforts to achieve the SDGs and indicating how government agencies and other actors in society can contribute.

History of Sustainable Development in Sweden

Sustainable development - as a well-defined concept - has emerged from a series of Conferences and Summits, where influential people have tried to agree on how to tackle the “burning issues” of the 21st Century: poverty, increasing inequality, environmental and human health degradation.

The first country in the world to pass an environmental protection act in 1967, Sweden also hosted the first UN conference on the global environment in 1972. Since then, Sweden has not looked back, managing to grow its economy substantially while reducing carbon emissions and limiting pollution. More than half of Sweden's national energy supply comes from renewables and a thorough legislation aims at further reducing greenhouse gas emissions.

For more than a decade, Sweden has been in the top ten of the globally respected Environmental Performance Index produced by Columbia and Yale universities, with exceptionally clean air and clean water alongside its low emissions. There is still much to be done, though, and being one of the world's wealthiest countries increases Sweden's overall environmental footprint. It might seem an impossible struggle, but previous successes in everything from tackling acid rain to recycling show that environment and development can go hand in hand.

Renewable energy could be power generated from water, wind or the sun or any other source that is replenished through a natural process. The share of renewable energy used in Sweden keeps growing. Already in 2012, the country reached the government's 2020 target of 50 per cent. For the power sector, the target is 100 per cent renewable electricity production by 2040. Sweden has a rich supply of moving water and biomass, which contributes to the country's high share of renewable energy. Hydropower (water) and bioenergy are the top renewable sources in Sweden – hydropower is mostly for electricity production and bioenergy is for heating.

Sustainability and development hand in hand

The Swedish green model means integrating business and sustainability. Together with its Nordic neighbors, Sweden has emphasized that green growth can drive transition through technical innovation rather than pose a risk. This involves adapting society to cope with environmental changes already underway. Man-made global warming means temperatures are predicted to rise by at least 2 degrees centigrade over the next century, and issues such as food security, extreme weather and economic upheaval could be felt by countries all over the world. The fight for sustainability is global, and in 2015 the world agreed on 17 sustainable development goals to create a better and fairer world by 2030.

Swedish environmental milestones

Sweden's reputation as an environmental pioneer began more than half a century ago. Here are some milestones, past and future.

1967

Sweden was the first country to establish an environmental protection agency, Naturvårdsverket.

1972

Sweden hosted the first UN conference on the environment, which led to the creation of the United Nations Environment Programme (UNEP), the leading global environmental authority to this day.

1995

Sweden was one of the first countries to introduce a carbon tax, which has helped reduce dependency on fossil fuels.

1998 and 2002

Sweden was one of the first nations to sign and ratify the international climate change treaty Kyoto Protocol.

2001

The Stockholm Convention, largely a Swedish initiative, was a global treaty aimed at phasing out the production and use of persistent organic pollutants.

2017

Sweden ranked third in the Global Cleantech Innovation Index.

2018

Sweden's renewable share of the total energy consumption is was nearly 55 per cent.

2020

Sweden ranked second in the Global Innovation Index and topped the Global Sustainable Competitiveness Index.

2021

Sweden ranked second in the UN Sustainable Development Report and the Global Innovation Index and topped the Global Sustainable Competitiveness Index.

2030

Goal: The Swedish transport sector is fossil-free.

2045

Goal: Sweden is fossil-free and, thus, climate-neutral

Literature Review

Nina Weitz, Asa Persson, Mans Nilsson, and Sandra Tenggren (September 2015), carry out in-depth interpretations of a selection of targets to see what issues were most relevant to Sweden; what we could learn about the current status and recent trends in Sweden in relation to the target and its achievement; and what policies are currently in place. This information would be vital for planning national action. The paper also summarizes some of the main common challenges encountered in the interpretation process, mostly linked to the wording and focus of the targets themselves. It emphasizes the fact that this interpretation is by its nature a highly political process; data and scientific analysis are important input, but only rarely point to national targets or means of achieving them. Finally, the authors discuss where the SDG agenda would fit in relation to current government policies and structure.

Karin Skill, Cecilia Axell, and Per Gyberg (22 Sept, 2022), adopt a critical perspective on knowledge about sustainable development in Swedish free teaching materials, where certain ways of illustrating sustainable development can make invisible alternative ways to understand and delimit it. They analyze the physical, free materials for school teaching, distributed by Utbudet. The materials were produced between 2008 and 2019. Their analysis shows that there is a focus on facts, certifications, and technical fixes, as well as scientific and societal consensus. Taken together, their study shows that the free materials convey that the global situation has improved and that development is on the right track, rather than in crisis, or that the sustainability problems are complex and difficult to manage.

Ronnebring and Ellen (31 January 2022), focus on how two countries, Sweden and the United Kingdom are working towards achieving goal 13 of the Sustainable Development Goals. Policies, implementations of policies, and actions are assessed. The study is a comparative case study based on secondary data presented by each country in official reports, the annual Sustainable Development Report, and the Nationally Determined Contribution report by each country. The findings of the study show that both Sweden and the United Kingdom are passionately working towards achieving the climate goals and have pointed out relevant policies and actions to meet the SDGs. Progress has been made in both countries as emission rates have been radically reduced but despite their devotion, both countries are far from reaching the climate goals as the overall progress of implementation of policies is not at satisfactory levels.

Objectives of Study

- To understand and get an insight into the Swedish system of Sustainable Development
- To understand the factors that led Sweden to become one of the top country in terms of Sustainable development
- To suggest changes in the existing system and predict performance in future
- To compare the Swedish model of sustainable development with that of India

Research Methodology

- **Data-** The data collected is secondary data as the paper contains pre-collected data from various sources
- **Research Paper-** Descriptive analysis, graphs, correlation and t-test have been used in the paper

- **Time Period-** The data was collected within the time period of 2015-2022
- **Research Tools-** The data was collected from internet websites, official reports, and other published research papers
- **Type of Analysis-** Descriptive and Predictive analysis has been followed throughout the paper

Analysis of Sweden on the basis of the First Goal of Sustainable Development – NO POVERTY

In this paper we will focus on Sweden’s achievement with respect to the 1st goal of Sustainable Development i.e. No Poverty.

Eradicating extreme poverty for all people everywhere by 2030 is a pivotal goal of the 2030 Agenda for Sustainable Development. Between 2015 and 2018, global poverty continued its historical decline, with the poverty rate falling from 10.1 percent in 2015 to 8.6 percent in 2018. Nowcasts suggest that owing to the COVID-19 pandemic, the global poverty rate increased sharply from 8.3 percent in 2019 to 9.2 percent in 2020, representing the first increase in extreme poverty since 1998 and the largest increase since 1990 and setting back poverty reduction by about three years.

The impact of the COVID-19 pandemic reversed the steady progress of poverty reduction over the past 25 years. This unprecedented reversal is being further exacerbated by rising inflation and the impacts of the war in Ukraine. It is estimated that these combined crises will lead to an additional 75 million–95 million people living in extreme poverty in 2022, compared with pre-pandemic projections.

Data Analysis

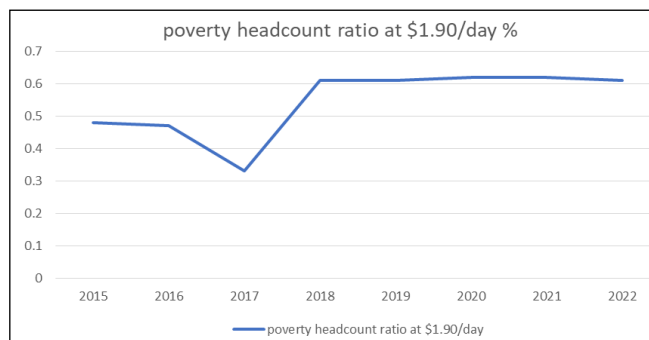


Fig 1

Table 1

Year	2015	2016	2017	2018	2019	2020	2021	2022
Poverty Headcount Ratio at \$1.90/day %	0.48	0.47	0.33	0.61	0.61	0.62	0.62	0.61

Description

The above table and figure show the estimated percentage of the population that is living under the poverty threshold of US\$1.90 a day in Sweden from 2015-22.

Trend

A steep decline in the poverty headcount ratio was observed in 2017. But after that, it shows a sharp increase in 2018 and since then it is constant.

Fig 2

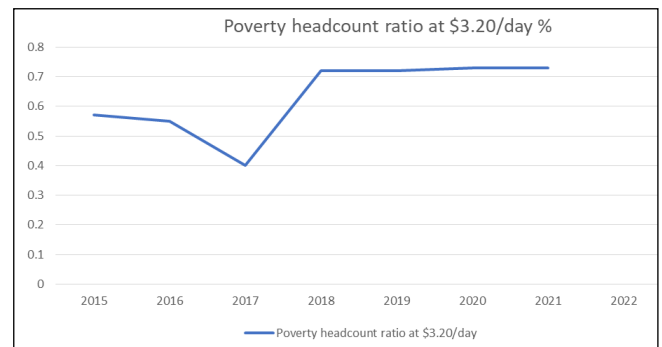


Table 2

Year	2015	2016	2017	2018	2019	2020	2021	2022
Poverty Headcount Ratio at \$3.20/day %	0.57	0.55	0.4	0.72	0.72	0.73	0.73	0.72

Description

This table and graph show the estimated percentage of the population that is living under the poverty threshold of US\$3.20 a day in Sweden from 2015-22.

Trend

A similar trend can be seen in the above table and figure as that of US \$1.90/ day.

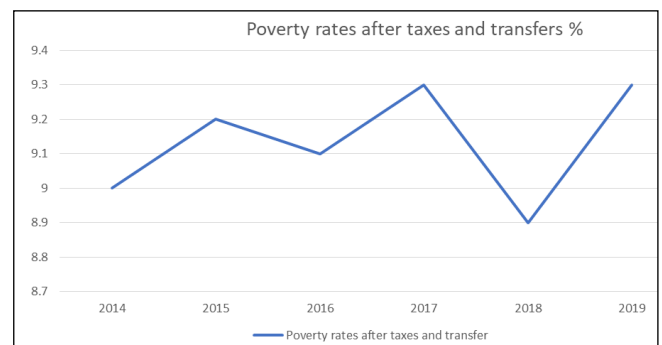


Fig 3

Table 3

Year	2014	2015	2016	2017	2018	2019
Poverty Rates after Taxes and Transfers	9	9.2	9.1	9.3	8.9	9.3

Description

This table and figure show that Relative poverty that is measured as the share of the population whose incomes fall below half the median disposable income for the entire population. The income threshold for relative poverty changes over time with changes in median disposable income.

Trend

A fluctuating trend has been observed with an increase can be seen in the year 2014 which is followed by a decline. In 2015, the poverty rates increase again. However, there is a sharp decline in 2018 and a sharp increase in 2019.

GDP Growth Rate of Sweden

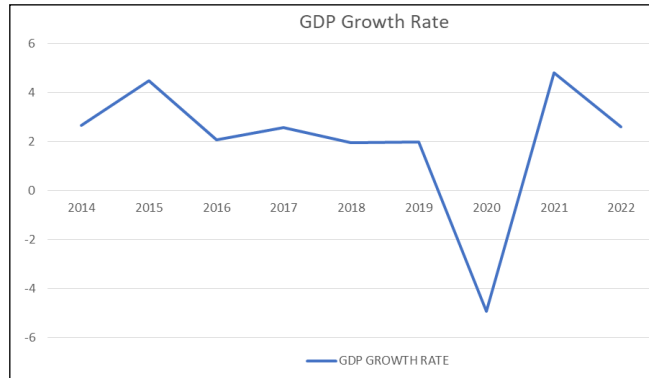


Fig 4

Table 4

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022
GDP Growth Rate of Sweden	2.66	4.49	2.07	2.57	1.95	1.99	-4.93	4.80	2.6

Trend

The above table and figure show that there was a major decline in the GDP growth rate of Sweden in 2019 due to covid-19. However, the economy recovered from 2020-2021 but there was again a downfall in 2022.

Correlation between GDP & Poverty Headcount Ratio

A negative correlation of value -0.00776 has been observed between the GDP growth rate and Poverty headcount ratio which shows that as the poverty headcount ratio increases GDP decreases and vice-versa. Though correlation does not apply causation, it is correct to believe the negative relationship between the two.

Thus, eradication of poverty should be one of the major aims of any country. Some steps taken by Sweden to eradicate poverty are: -

- Developing an inclusive labor market and promoting employment as a right and opportunity for all
- Guaranteeing an adequate income and resources to live with human dignity
- Tackling educational disadvantage
- Preserving family solidarity and protecting the rights of children
- Ensuring good accommodation for all
- Guaranteeing equal access to quality services (health, transport, social, care, cultural, recreational, legal)
- Improving the delivery of services

T-test between GDP growth rate & Poverty headcount ratio

Null H₀ – There is no difference between the group mean of GDP growth rate and poverty headcount ratio.

Alternative H₀ – There is a significant difference between the group mean of GDP growth rate and poverty headcount ratio.

The value of the T-test is -0.00776 which is less than the critical value of 0.5. thus, the result is significant and we reject the Null H₀ and accept the Alternative H₀. Thus, strategies to combat poverty as the first aim of sustainable development will have a significant effect on the GDP growth rate as a negative correlation has been observed between the two.

Lessons for India

1. Political commitment to policy coherence for sustainable development

In December 2020, the Swedish Parliament approved a government bill with an overarching objective for the implementation of the 2030 Agenda: Sweden will implement the 2030 Agenda to achieve economically, socially and environmentally sustainable development through a coherent policy nationally and internationally. Implementation will be guided by the Agenda’s ‘leave no one behind the principle’.

- Delivery on leaving no one behind

Sweden is committed to delivering on the principle of leaving no one behind.

This is a commitment to realizing human rights, gender equality, addressing inequalities within and between countries, universal social protection, strengthening empowerment and participation, and the transition towards resource-efficient, resilient and climate-neutral economies. Moreover, Sweden views promoting multidimensional poverty reduction, social dialogue, and decent work as critical elements, as well as improving data to monitor progress on compliance with the principle.

- Child and youth perspectives

The perspectives, engagement and innovation of young people are of great importance to the implementation of the 2030 Agenda. Issues of importance to Swedish young people include the environment and climate, gender equality and preventing oppression and discrimination.

- A whole-of-society approach

Multiple actors in Sweden are involved in the implementation of the 2030 Agenda. Government agencies and municipalities are working together to implement the 2030 Agenda. The research community is contributing with cutting-edge research and innovation on sustainable development. Civil society is paving the way through its own efforts and by pushing decision-makers to act. The business community is at the forefront of integrating the 2030 Agenda into their business models and driving new innovations. Trade unions are pushing for social dialogue and decent working conditions.

Conclusion

From the viewpoint of society's needs, it is necessary to ensure the further development of the economy on the one hand, and, on the other hand, to reduce environmental contamination and ensure environmental protection. Sustainable development brings out stability in the requirements of the environment. It makes the resources

available for use by future generations. Sustainable development is a concept that draws on two frequently opposed intellectual traditions: one concerned with the limits that nature presents to human beings, the other with the potential for human material development which is locked up in nature.

Sustainability considers nature and humans from the viewpoint of optimum development of the whole biosphere. The ecological behavior should not be reduced to the riotous discussions around nuclear power plants and water structures or industrial complexes. We must plan and build big structures. At the same time, we must consider the impacts of these constructions on the environment and human health.

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