

The Real Property Register Allows you to Reach the Sustainable Development Goals

Anders Svensson, Sweden

Key words:

access to land, Cadastre, Implementation of plans, Land Management, Real Estate development, Cost management, Spatial planning, valuation

SUMMARY

Sweden's Real Property Register stands for stable and secure ownership of land in Sweden and is a cornerstone for democracy. The register contains information of ownership of properties, joint property units, rights, joint facilities, addresses and buildings etc.

What can the Real Property Register contribute with in order to achieve the sustainable development goals in 2030?

The register contributes to a greater or lesser extent to all UN development goals for planning purposes and for making correct decisions, it's important to work with the quality of information. The information should meet requirements of society in general, for smart built environment as well as securing of rights for property owners.

To give some examples, a stable and well-developed country has great opportunities to fight poverty and provide clean water and sanitation for everyone, work for sustainable energy and fight the climate change. The sustainable goals are no obstacle to economic growth, an improved infrastructure and industry where innovations can be developed increasing the opportunities further.

Working for a sustainable society in accordance with the sustainable goals can affect how a country acts on different issues, but the demands that are made are not always an obstacle to development.

We just need to think and act differently!

The Real Property Register Allows you to Reach the Sustainable Development Goals

Anders Svensson, Sweden

1. INTRODUCTION

In the UN goals from 2015 you can read:

In 2015, world leaders agreed to 17 goals for a better world by 2030. These goals have the power to end poverty, fight inequality and address the urgency of climate change. Guided by the goals, it is now up to all of us, governments, businesses, civil society and the general public to work together to build a better future for everyone.



Figure 1. UN 17 goals (<https://www.globalgoals.org/>)

The UN Development Goals are a major challenge for the world community and it will require great sacrifices to achieve them. Until now, however, the work towards these goals have been quite slow. Often more short-term goals, e.g. realting to economic growth, are seen as more important than the fulfillment of the global goals.

The question, however, is whether we have the opportunity to wait? We can already see many examples where human environmental impact has led to major disruptions.

Will we succeed in reaching the set of goals until 2030? Unfortunately, I think the answer to this question is no! However, the fact that the goals are on the agenda means that more actions are taken to improve the situation than would have been done if no goals were created. I believe in the ability of humans to solve difficulties that exist today and that in the future is expected

to be much worse than today if nothing is done now. Solutions can occur when politics, science, companies and citizens work together. However, there are a lot to do and improve in this area, but we will succeed in some way.

Sacrifices need to be made, but developing sustainably can also be a success factor where new companies and opportunities are linked to the fulfillment of the global goals.

However, in order to succeed in the long run, EVERYONE has to work for a sustainable world. This paper will continue as to how Sweden's Real Property Register can contribute to meet the global goals.

I would like to say that a stable and secure ownership with a Real Property Register can, more or less, contribute to all the global goals, which will be presented in this paper.

2. THE REAL PROPERTY OF SWEDEN

It all started in 1628 on April 4, when the King of Sweden, Gustaf II Adolf gave the instruction to Anders Bure to conduct a systematic survey of the country. This was the starting point for the collection of information that is used in the Real Property Register that Sweden has today.



Figure 2. 1628, mapping of Sweden began

Below is an overall picture of today's Real Property Register as a basis for the reasoning about what the Real Property Register can contribute with in order to achieve the global goals.

The Real Property Register is Sweden's official registry of how the land in our country is divided and who owns what. Sweden is divided into more than 3.3 million properties where Lantmäteriet secure the ownership and boundaries for these assets.

The digital register was developed during the 1970s and during the period 1975-1995 an intensive work was carried out to transfer information from the manual Land and Property Register Books to the digital Real Property Register.

The Real Property Register allows you to reach the Sustainable Development Goals (10619)
Anders Svensson (Sweden)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10-14 May 2020

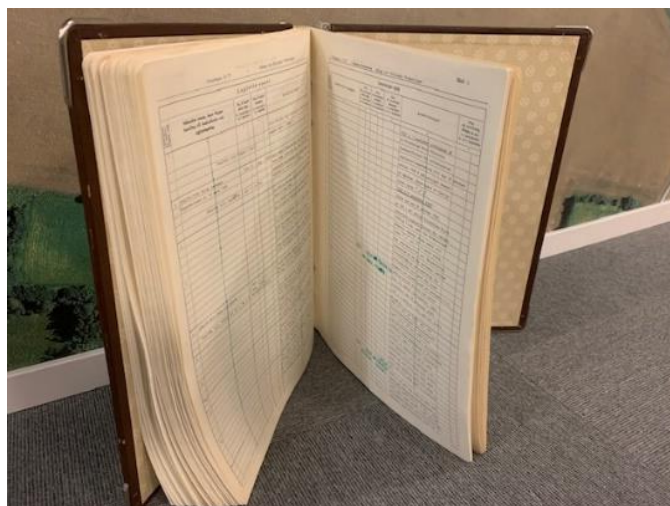


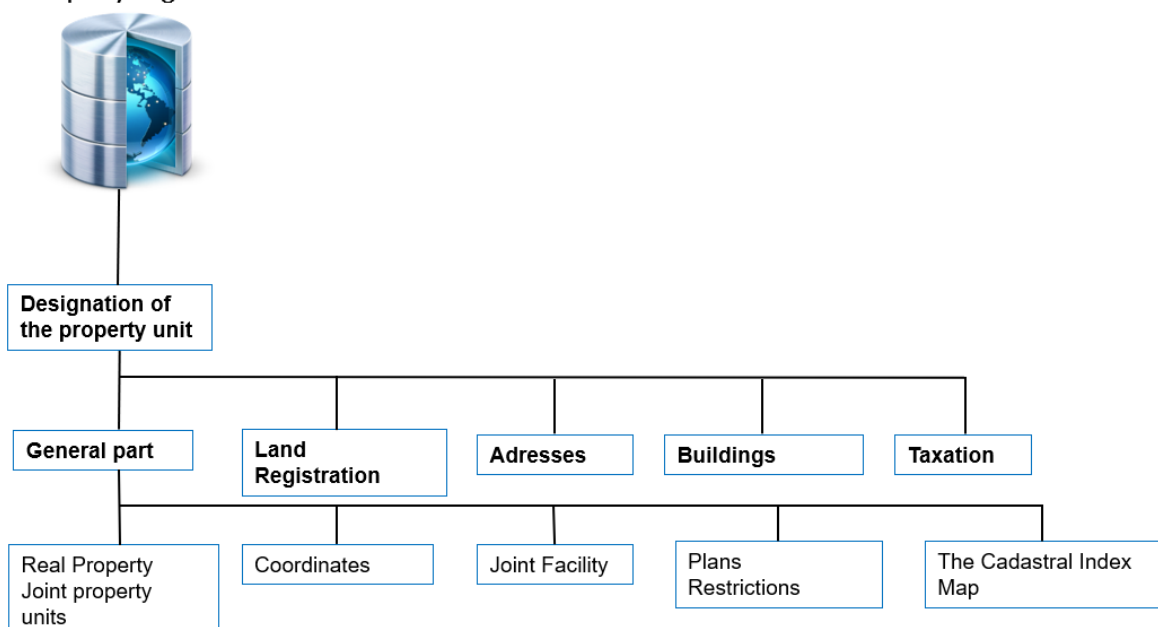
Figure 3. Land Register Book (Total 2800 running meters)

In addition, the register contains information on addresses, buildings and property tax assessment. The information is used within various activities, including the granting of credit and the identification of the correct owner during property sales.

The Real Property Register also includes the digital cadastral index map which is continuously updated.

Lantmäteriet search the Real Property Register and enter new property information, but also receive a lot of help from others in keeping the register up to date. Municipal cadastral agencies, the Swedish Tax Agency and the country's municipalities contribute regularly to collecting and updating property-related information.

Real Property Register



The Real Property Register allows you to reach the Sustainable Development Goals (10619)
Anders Svensson (Sweden)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020

Figure 4. Schematic picture of the parts in the Real Property Register of Sweden

The register is constantly updated with the changes that take place on the properties. In order to maintain a good and useful quality, Lantmäteriet devotes considerable resources to continuously improve the quality of the register. The society's expectations have changed since the register was developed in the sense that the register has gone from being a signal system towards the expectations that the register can be used as a decision-making system.

3. REAL PROPERTY REGISTERS CONTRIBUTE TO ACHIEVING THE SUSTAINABLE GOALS IN 2030

With this background in mind, a review of the respective sustainability goals will be made with regard to whether, and in such cases how, the Swedish Property Register contributes to meeting the sustainability goals. These are just a few examples and the ambition is not to present a complete picture, as there are certainly many more examples than those presented below.



1 No poverty

The fight against poverty is a very important goal to avoid conflicts. According to Abraham Maslow's theory, the needs for a person is presented in the form of a staircase with basic needs. Theories' conformity to reality is discussed in the research area, but regardless of what the research says, there is something to learn from it.

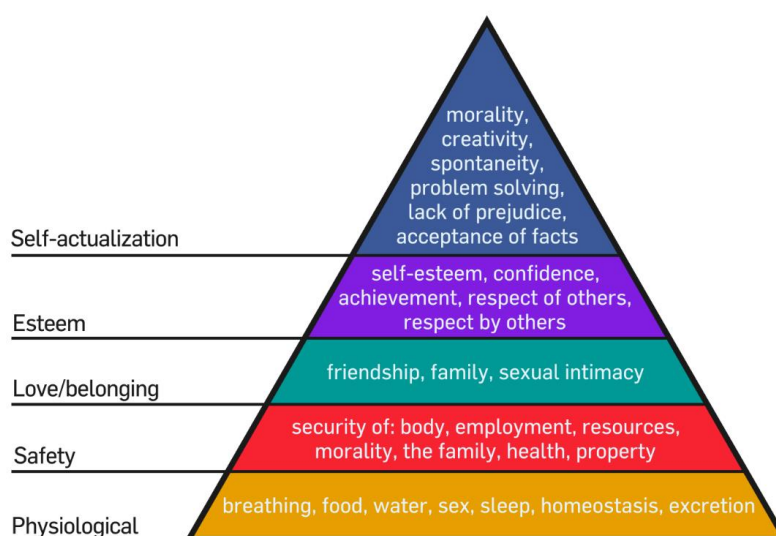


Figure 5. Abraham Maslows Hierarchy of needs

Linked to the Real Property Register, it can be mentioned that a secure and safe ownership contributes to the fight against poverty. A bank then can trust lending money with the property as collateral. The financial funds that are then in circulation in the society can be used for investments that further develop the economy which by extension helps to reduce poverty.

The Real Property Register allows you to reach the Sustainable Development Goals (10619)
Anders Svensson (Sweden)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020

In Sweden, the properties in the Real Property Register are taxed by collecting an annual tax for those who own properties. Tax is also charged in connection with the transfer of real properties and the cost of mortgage deeds. This strengthens the state's finances, where some of these funds are used to combat poverty both in Sweden and in other countries.

By combating poverty, the country is building up resilience to economic, social as well as environmental disasters. According to Maslow's theory, a number of the basic needs would be met if poverty is combated. A sustainable Real Property Register can contribute to this.



2 Zero hunger

Good government finances can help in the fight against hunger where annual tax to the state is collected from the Real Property Register as described above. Lantmäteriet contributes to the development in some countries in Africa which, by extension, can contribute to no hunger. Unfortunately, the goal of no hunger is a goal that will probably be difficult to meet by 2030.

Planning of cultivations of sustainable and yield-efficient crops is facilitated when a secure ownership exists. Through ownership, long-term planning and investment of the land used for cultivation can also be carried out instead of short-term planning which can often mean depletion of the land due to one-sided cultivation.



3 Good health and well being

It will be easier to monitor, plan and make efforts to improve the soil's environment, which in turn will lead to better health for those who use the land. By associating, for example, contaminated land for the properties it is easier to plan and take actions to sanitize the soil. If no one feels responsible for the land / property, no one will work to develop it. Reduced poverty also means that health opportunities are increasing.



4 Quality education

A key factor in developing a country is that there is the opportunity for education for everyone. There is no direct link to the quality of education as to the Real Property Register. However, education is the basis for the development of a country and in Sweden, education is free for all, as the state finances the education. Therefore, indirectly, all taxes contribute to various forms of service functions, where education is one of them. To develop and follow up education in Sweden, there is a central authority that deals with these issues.

All countries have the conditions to succeed, but there is a strong link to the countries that have a well-developed education business also to succeed. In this context, the Real Property Register plays a major role as considerable tax revenue is taken into Sweden that can be used to develop the education offered by the country.



5 Gender Quality

In Sweden, work for gender equality has been developed and discussed for a long time. As an example, women in Sweden were given the right to vote in 1919 and thereafter work in the field of gender equality continued to develop. In the field of law it can be mentioned that there are equality laws, discrimination law, working time law, law on parental leave to name a few laws which are governing work in the gender equality area.

Even though work has been going on for a long time, there is still a lot to do in the area and here the Real Property Register can contribute statistical information that can be used to develop the area. An example of this is the development of information about male and female ownership of properties. In addition to the laws above, work at Lantmäteriet and in this case within the property information area permeates objectivity where everyone should be treated equally. It is permissible to have a free opinion formation in which respect for everyone's equal value, freedom and dignity must always exist.

In Sweden, there is a saying called "Live as you learn", i.e.. you should behave yourselves the way you want others to behave. This is something that Lantmäteriet works to incorporate everyday where the ambition for this is to permeate the entire business.



6 Clean water and sanitation

By monitoring ownership, safe installations can be carried out within water and the sewer area to ensure clean water and a sustainable and environmental purification of the wastewater. Planning work is facilitated and simplified. Some examples of such installations are community facilities for water supply, desalination plants on islands and sewage treatment plants.

In the Real Property Register, the cadastral formation and the property development work, issues are taken into account to ensure that the properties have the opportunity to be used for the purpose referred to. Here is issues regarding clean water and sanitation very important.



7 Affordable and clean energy

In Sweden, the electricity-intensive industry and the heating of housing account for the largest electricity consumption. Sweden has a very low proportion of fossil fuels in electricity generation compared to other countries. This is due to good natural conditions for hydropower and the decision to invest in nuclear power, which also is not good for the environment. Hydropower accounts for 40 percent of Sweden's electricity generation. The three nuclear power plants also account for 40 percent, wind power for 11 percent and cogeneration plants that are largely fired with renewable biofuels account for the remaining 9 percent.

In 2017, Sweden adopted a climate policy framework. The framework consists of a climate law, climate goals and a climate policy council. The long-term goal means that Sweden will not have any net greenhouse gas emissions by 2045. That requires major investments in sustainable energy such as energy from solar, wind and water. Investments in the wind power area are currently very intense, but solar power sources are also being used more and more. Most of the facilities that set up require new lines where the Real Property Register's information is needed for this work.

The Real Property Register contributes to the work to ensure the sustainable energy as the power companies can plan and build their lines with the knowledge that decisions about management rights are handled in a safe and correct way. Information to get in touch with property owners is needed to be able to plan as well as inform about new requirements and guidelines in the work to create sustainable and clean energy for everyone. With the help of the Real Property Register, transfers of properties can be handled in a legally safe and expeditious manner that will increase the speed for the change that has to be taken place.

The Real Property Register allows you to reach the Sustainable Development Goals (10619)
Anders Svensson (Sweden)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020



8 Decent work and economic growth

In Lantmäteriet's work in other countries, Lantmäteriet contributes to Swedish policy for global development. The contribution is mainly focused on efforts to combat poverty and provide economic and social development to developing countries. Often, great efforts are made in the real property information area, as land issues are an important factor for a country to be able to develop in the area of finance. Lantmäteriet often contributes with its expertise in the area of human resources in projects that Lantmäteriet participates in order to help the country to be able to develop within that area.

The opportunities given with the secure ownership obtained with the help of the Real Property Register allow properties to be used as collateral to obtain loans whereas the financial finances are often used for the development. For example, companies and other businesses and innovations can increase economic growth, which in turn can contribute to the development of working conditions.



9 Industry, innovation and infrastructure

In order to develop the industry, enable innovation and to enable infrastructure to be developed in a sustainable way, a lot of prerequisites must be met. Many of these can be derived from the other sustainability goals, where one goal can improve the conditions for solving another, for example, target 8 Decent work and economic growth, which is a prerequisite for developing this goal.

Lantmäteriet is currently working on a project that aims to develop a smart community building process with the ultimate goal of promoting digital administration including an uninterrupted information flow around the entire planning and building process. This means that all inputs and decisions that need to be made can be made in a digital chain, meaning that the whole process can be simplified and go faster for entrepreneurs and other property owners.



10 Reduced inequalities

The Real Property Register contributes to reducing inequalities as described under Objective 5 Gender Quality.

The Real Property Register allows you to reach the Sustainable Development Goals (10619)
Anders Svensson (Sweden)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020



11 Sustainable cities and communities

Making a whole city or a whole community sustainable is a very big task. In order for sustainability goals to be met, EVERYONY needs to contribute to this by changing behavior and habits and by developing conditions for the service that everyone need and uses. In this context, information and information on sustainable management as well as on directives and requirements is important to convey to residents and property owners. Addresses from the Real Property Register are often used here to simplify contact with the property owners. The project to create a smart community building process also contributes to creating sustainable cities and communities.

All construction of houses and infrastructure for a city requires extraordinary efforts if they are to be fully sustainable. In Kiruna in northern Sweden, a city relocation is currently underway. A large part of the city needs to be demolished and rebuilt elsewhere because the mining process that is underway will cause parts of the city to collapse. Instead of demolishing and rebuilding everything, parts of the city's buildings are instead moved to the new community, which is more sustainable. In the process of building a brand new city, the part of the building permit process, where the Real Property Register plays a central role, is very important.



**Figure 6. City move in Kiruna,
more sustainable than to build new buildings**

The Real Property Register allows you to reach the Sustainable Development Goals (10619)
Anders Svensson (Sweden)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020



12 Responsible consumption and production

Increased growth and a stronger economy for companies can sometimes have an opposite effect on sustainability. If the financial return requirements are large for companies, shortcuts can sometimes be taken that are not always sustainable. Here, it is very important for governments to act and set requirements that provide incentives that will make corporate production more sustainable.

With the right incentive that makes it financially advantageous to work long-term and sustainable instead of short-term unsustainable. With that thought, corporate production can be developed in the right way.

The consumers are the biggest incentive for a company. What we talk about is “consumer power”. If no one wants to use a product or service, the product or service quickly disappears from the sales page. Therefore, it is very important that the awareness of people is necessary to be able to live and act sustainably. Consumers also need to review their needs and change their behavior. In this context, the Property Register contributes to the conditions for changing behavior in accordance with the sustainability goals above.



13 Climate action

We need to think long term! Unfortunately, today we suffer from doing the opposite. In order for our children to have the opportunity to enjoy the wonderful blue planet we actually live on, changes must be made in this area and that fast. Sweden has, through Greta Thunberg, got a spokesperson who is not afraid to speak clear language to the world’s “member”. However, as humans, we need to meet our basic needs first. If the basic needs are not being met, if you, for example, do not have food for the day, it is easy to forget about the long-term sustainable environmental thinking.

Sustainability is about so much, but ultimately, all sustainability goals lead to increased conditions for coping with climate change. By obtaining sustainable planning of the land, facilitating electricity production in the construction of wind, water and solar, production of sustainable goods, etc., the climate can be improved. However, action is required from politicians, companies as well as by all of us people to change the climate. In this context, the Real Property Register is a basis that can be used to make things happen.

The Real Property Register allows you to reach the Sustainable Development Goals (10619)
Anders Svensson (Sweden)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020



14 Life below water

Today, the marine part is not included in the Real Property Register, but mainly other authorities (the Swedish Agency for Marine and Water Management, the County Councils etc.) that handles sea and water issues in Sweden. However, there are long-term plans to introduce a marine cadastre in the Real Property Register to facilitate planning and various sustainable activities where both the marine and land-based environment can be managed in a coordinated manner. Today, this is handled through joint collaboration between the authorities.



15 Life on land

Just as for Objective 14 “Life below water”, data on nature conservation, national parks, nature reserves are handled by other authorities (the Swedish Environmental Protection Agency, County Councils etc.) in Sweden. However, the Real Property Register is supplemented in a governmental collaboration with the information required for property formation measures. This means that the information contained in the register about nature conservation, national parks, nature reserves etc. can be used together for sustainable planning.



16 Peace, justice and strong institutions

According to the above, the basis for a peaceful country is that a stable and secure tenure /ownership exists. Here, however, it is important to ensure that there are laws and regulations that together make it possible for everyone to be included in society, regardless of whether you are a property owner or not. As it is possible to borrow money with the property as collateral in Sweden, more people can be included in the ownership of land. The feeling of injustice can be reduced as everyone has the opportunity to own a property.

A prerequisite for forming strong joint institutions that can drive and work to meet the sustainability goals is that the state receives revenue for the activities being conducted. In Sweden, this is done by taxation. Here, the Real Property Register's activities contribute to the state receiving large revenue that can be used for the activities of various authorities.



17 Partnerships for the goals

To succeed with the 17th goal, well-developed coordinated work is needed between the 16 different sustainability goals. Just as described in some cases above, a prerequisite for success with a specific goal is often that success has been achieved with another goal.

Will we succeed in achieving all the sustainability goals by 2030? Personally, I don't think so. However, I believe that we will have achieved very much by 2030. I believe in the human beings ability and power to solve and deal with this and especially when the society are now starting to push for changes.

In this context, a Real Property Register such as Sweden's register is only a small puzzle piece in the big puzzle to be put together but it is an important piece. However, the puzzle will not be complete unless all pieces are in place.

The Real Property Register allows you to reach the Sustainable Development Goals (10619)
Anders Svensson (Sweden)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020



Figure 7 Example from Swedens Real Property Register



Figure 8 Sustainability goals with one of the puzzle pieces

The Real Property Register allows you to reach the Sustainable Development Goals (10619)
Anders Svensson (Sweden)

FIG Working Week 2020
Smart surveyors for land and water management
Amsterdam, the Netherlands, 10–14 May 2020

4. REFERENCES

- www.lantmateriet.se The biography of Lantmateriet
9553 Information Quality - A Critical Success Factor How to make it all right! FIG 2018
<https://www.globalgoals.org/> UN goals from 2015
https://en.m.wikipedia.org/wiki/Abraham_Maslow Abraham Maslow Hierarchy of needs
<https://naturvardsverket.se/Miljoarbete-i-samhallet/Miljoarbete-i-Sverige/Uppdelat-efter-omrade/Klimat/Sveriges-klimatlag-och-klimatpolitiska-ramverk/> Swedens climate law and climate policy framework
<https://el.se/elanv%C3%A4ndning> Use of electricity in sweden
<https://www.lantmateriet.se/sv/Om-Lantmateriet/Om-oss%20/Internationell-verksamhet/Tjansteexport/> International unit at Lantmateriet

5. CONTACTS

Head of section Real Property Information, land register

Mr Anders Svensson
Lantmateriet
801 82 Gävle
SWEDEN

Phone number: +4670 371 88 37

Email: anders.svensson@lm.se