Unit 4 Outcome 1:
Sustainable Development Goals

KK:
Rationale and objectives of the UN’s SDGs
Key features of SDG 3 ‘Ensure healthy lives and promote wellbeing for all at all ages’
Relationships between SDG 3 and SDGs 1, 2, 4, 5, 6 and 13 that illustrate collaboration between the health sector and other sectors in working towards health-related goals
On September 25th 2015, 193 countries adopted a set of goals to end poverty, protect the planet and ensure prosperity for all as part of a new sustainable development agenda. The goals cover the three dimensions of sustainable development: social inclusion, economic growth and environmental protection. Each goal has special targets (totalling 169 targets) to be achieved over the next 15 years (by 2030).

For the goals to be reached, everyone needs to do their part: governments, the private sector, civil society and people like you.

http://www.un.org/sustainabledevelopment/
Background

• On 1 January 2016, the **17 Sustainable Development Goals** of the **2030 Agenda for Sustainable Development** — adopted by world leaders in September 2015 at an historic **UN** summit — officially came into force. Over the next **fifteen years**, with these new Goals that universally apply to all, countries will mobilise efforts to **end all forms of poverty**, **fight inequalities and tackle climate change**, while ensuring that no one is left behind.

• The **SDGs** build on the success of the Millennium Development Goals (MDGs) and **aim to go further to end all forms of poverty**. The new **SDGs** are unique in that they call for action by **all countries, poor, rich and middle-income** to promote prosperity while **protecting the planet**. They recognize that **ending poverty** must go **hand-in-hand** with strategies that build **economic** growth and addresses a range of **social** needs including **education**, health, **social protection**, and **job opportunities**, while tackling **climate change** and **environmental protection**.

• While the **SDGs** are not legally binding, **governments are expected to take ownership and establish national frameworks for the achievement of the 17 SDGs**. Countries have the primary responsibility for follow-up and review of the progress made in implementing the **SDGs**, which will require quality, accessible and timely data collection. Regional follow-up and review will be based on national-level analyses and contribute to follow-up and review at the global level.
5 areas of importance

People
“We are determined to end poverty and hunger, in all their forms and dimensions, and to ensure that all human beings can fulfil their potential in dignity and equality and in a healthy environment.”

Prosperity
“We are determined to ensure that all human beings can enjoy prosperous and fulfilling lives and that economic, social and technological progress occurs in harmony with nature.”

Planet
“We are determined to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations.”

Peace
“We are determined to foster peaceful, just and inclusive societies which are free from fear and violence. There can be no sustainable development without peace and no peace without sustainable development.”

Partnership
“We are determined to mobilize the means required to implement this Agenda through a revitalized Global Partnership for Sustainable Development, based on a spirit of strengthened global solidarity, focused in particular on the needs of the poorest and most vulnerable and with the participation of all countries, all stakeholders and all people.”
Rationale

• A new set of goals and targets were needed when the **Millennium Development Goals** (MDGs) finished in 2015. The MDGs provided a global framework of action to address poverty and make global progress on education, health and wellbeing, hunger and the environment. They resulted in significant improvements in global health and wellbeing and human development. More than 1 billion people were lifted out of **extreme poverty**, progress had been made against hunger, more girls were attending school and some action had been taken to protect the planet.

• Progress in all areas was uneven across regions and countries, leaving millions of people behind, especially the poorest and those disadvantaged due to sex, age, disability, ethnicity or geographical location. This showed there was still a lot of work to be done.

• New global challenges had emerged that needed to be considered. These included the impact of increasing conflict and **extremism**, widespread migration, economic and financial instability and large-scale environmental changes. These challenges have the capacity to undermine many of the achievements that had been made through the MDGs.
Objectives

• end extreme poverty
• fight inequality and injustice
• address climate change.
**SDGs: 1, 2, 3, 4, 5, 6 and 13**

**Must be able to relate all the goals listed BACK to number 3.**

Fill in as we go through.

<table>
<thead>
<tr>
<th>Sustainable Development Goal (SDG) Name</th>
<th>Description</th>
<th>How it relates to SDG 3</th>
<th>Who is involved? Collaboration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SDG 3  **Good Health and Wellbeing**
Ensure healthy lives and promote well-being for all at all ages

**Describe:**
This SDG aims to improve physical and mental health and well-being in all countries, by **reducing morbidity and mortality** due to common causes.

It aims to reduce maternal, infant, under-5 mortality, as well as premature mortality from both non-communicable and communicable diseases (such as AIDS, malaria and water-borne diseases).

It also aims to reduce injuries and deaths from **road trauma** as well as **address substance abuse** (such as narcotics and alcohol).

It also aims to ensure **universal health coverage** (including healthcare, medications and vaccines) and **universal access to sexual and reproductive health-care services** (including family planning).
### FIGURE 11.5 The key features of SDG 3

**SDG 3: Ensure healthy lives and promote wellbeing for all at ages**

**Target 3.8:** Achieve universal health coverage, including financial risk protection, access to quality essential healthcare services, medicines and vaccines for all

<table>
<thead>
<tr>
<th>MDG unfinished and expanded agenda</th>
<th>New SDG 3 targets</th>
<th>SDG 3 means of implementation targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1: Reduce maternal mortality</td>
<td>3.4: Reduce mortality from NCD and promote mental health and wellbeing</td>
<td>3.a: Strengthen the implementation of the Framework Convention on Tobacco Control</td>
</tr>
<tr>
<td>3.2: End preventable newborn and child deaths</td>
<td>3.5: Strengthen prevention and treatment of substance abuse</td>
<td>3.b: Provide access to medicines and vaccines for all, support research and development of vaccines and medicines for all</td>
</tr>
<tr>
<td>3.3: End the epidemics of HIV, TB, malaria and NTD and combat hepatitis, waterborne and other communicable diseases</td>
<td>3.6: Halve global deaths and injuries from road traffic accidents</td>
<td>3.c: Increase health financing and health workforce in research and development</td>
</tr>
<tr>
<td>3.7: Ensure universal access to sexual and reproductive healthcare services</td>
<td>3.9: Reduce deaths from hazardous chemicals and air, water and soil pollution and contamination</td>
<td>3.d: Strengthen capacity for early warning, risk reduction and management of health and wellbeing risks</td>
</tr>
</tbody>
</table>
SDG 3  **Good Health and Wellbeing**
Ensure healthy lives and promote well-being for all at all ages

**Key Feature 1 – Maternal and Child Health & Wellbeing**

Maternal mortality caused by 5 main things:

- haemorrhage (excessive bleeding)
- sepsis (an infection that affects the whole body)
- obstructed labour (i.e. when the baby cannot pass through the birth canal, either due to the mother’s small pelvis or the position of the baby in the uterus)
- unsafe abortion
- hypertensive disease (heart conditions caused by high blood pressure)

---

**FIGURE 11.6** Global maternal mortality ratio (deaths per 100,000 live births)

![Graph showing maternal mortality ratio from 1990 to 2015](image)

*Source: Adapted from data from Report of the Secretary-General, ‘Progress towards the Sustainable Development Goals’, United Nations, 2016.*
SDG 3 **Good Health and Well-Being**
Ensure healthy lives and promote well-being for all at all ages

**Key Feature 1 – Maternal and Child Health & Wellbeing**

Reasons for improvement

- Increased access to sexual and health services (antenatal care)
- More skilled health professionals at birth (can perform caesarean)
- Fewer adolescents becoming pregnant (bodies are not as able to cope). Stillbirths and newborn deaths 50% higher than those mothers who are 20-29.
- Greater access to family planning (contraceptive, planning 2 years between births)

- SDG 3 aims to reduce maternal mortality rates from 216 per 100 000 to less than 70 per 100 000 live births by 2030.

- NEED more money from government towards health services.

In low-income countries, only 56% of births in rural areas were attended by skilled healthcare workers compared to 87% in urban areas.
SDG 3  **Good Health and Well-Being**
Ensure healthy lives and promote well-being for all at all ages

**Key Feature 1 – Maternal and Child Health & Wellbeing**

Many infant deaths occur in the **neonatal period** — the first 28 days of life. Up to half of all these deaths occur within the first 24 hours of birth, and 75 per cent occur in the first week. Many deaths are due to preterm birth, **birth asphyxia** (lack of breathing at birth), and infections. Children who reach their fifth birthday have a much greater chance of surviving into adulthood.

The global under-five mortality rate was reduced by more than half, from 90 to 43 deaths per 1000 live births, between 2000 and 2015.

SDG 3 aims to end preventable deaths of newborns and children under five and reduce neonatal mortality from 19.2 per 1000 live births in 2015 to 12 per 1000 live births in 2030. It also aims to reduce under-five mortality rates from 43 deaths per 1000 live births to 25 per 1000 live births.
Key Feature 1 – Maternal and Child Health & Wellbeing

How to improve child health:

- Vaccinations
- Mothers have access to safe child birth facilities / medication / health professionals
- Access to safe water
- Adequate food
- NEED to research and develop new vaccines for tropical diseases.

Question:
Why would children born into poverty be almost twice as likely to die before the age of five than those from wealthier families?
SDG 3  **Good Health and Well-Being**

Ensure healthy lives and promote well-being for all at all ages

---

**Key Feature 2 – Communicable Diseases**

**HIV/AIDS**

HIV leads to AIDS, and mothers can pass it on to their children. 70-85% of people who have HIV contracted it due to unprotected sex.

Cannot be cured, however antiretroviral drugs have been developed that help manage the diseases. Most be taken continuously.

Between 2000 and 2015 new HIV infections were reduced by 40% (1.4 million). Due to investment in health services (allows access to drugs / research / diagnosis).

In sub-Saharan Africa, less than 40% of youth aged 15-24 have correct knowledge about HIV.

---

AIDS continues to be the leading cause of death among those aged 10-19 years in Africa, the 2nd most common cause of death among youth globally and the leading cause of death for women of reproductive age worldwide.
SDG 3  **Good Health and Well-Being**
Ensure healthy lives and promote well-being for all at all ages

**Key Feature 2 – Communicable Diseases**

**Malaria**
Parasite passed on via infected female mosquitoes. Can be cured. Destroys the body’s RBC and causes fever, headache, vomiting, can disrupt blood supply to organs, causing death.
Young children and pregnant women most at risk.
Vector control most effective – insecticides / nets
First ever vaccine currently being piloted.
There is preventative medication
Beginning of 2016 - malaria claimed the life of **one child** every **two minutes**. Still work to do.

Between 2000 and 2015, the number of deaths from malaria declined by 6.2 million or 62% globally, and in the same period mortality rates fell by 31% in the African region.
SDG 3  **Good Health and Well-Being**
Ensure healthy lives and promote well-being for all at all ages

**Key Feature 2 – Communicable Diseases**

**Tuberculosis**

Tuberculosis (TB) is a disease that affects the lungs, caused by bacteria that can spread via the air through coughing and sneezing. Causes weight loss, tiredness, coughing up blood, destroys lung tissue resulting in death.

Prevented via vaccinations or can be treated if caught early.

Between 2000 and 2015, mortality rates from TB fell by 45% or 37 million lives.

Despite this, the disease is still one of the top ten causes of death worldwide, and caused more deaths than HIV in 2015.
**SDG 3  Good Health and Well-Being**

Ensure healthy lives and promote well-being for all at all ages

---

**Key Feature 2 – Communicable Diseases**

**Neglected Tropical Diseases**

Diverse group of 18 diseases that are different in terms of biology and transmission, but have a significant impact.

Received very little funding = neglected.

Strategies to implement – creation of drugs, vector control, vets for public health, improve water and sanitation.

The SDG target is to reduce by 90%, the number of people needing treatment for these diseases by 2030.

---

In 2014, at least 1.7 billion people, in 185 countries, required treatment for at least one neglected tropical disease.

**Diseases:**

- *schistosomiasis*, which affects over 200 million people,
- *trachoma*, which affects over 150 million people, and
- *trypanosomiasis*, or sleeping sickness, which affects over 55 million people.
SDG 3  Good Health and Well-Being
Ensure healthy lives and promote well-being for all at all ages

Key Feature 2 – Communicable Diseases

Hepatitis
Hepatitis is inflammation of the liver caused by a viral infection. Five types - A, B, C, D and E. The five hepatitis viruses are very different — they differ in the way they are transmitted, how they affect population groups and health and wellbeing.
A & E – food and water-borne, have a vaccine, treatment = rest and fluids
B & C – blood-borne, B can be transferred from mothers to babies, C has an effective cure.
D - transmitted through contact with infected blood and only occurs in someone who already has Hep B.
Prevention – immunisations, blood screening before transfusions, safe sex, safe injections.

1.4 million deaths per year.
Hepatitis B accounts for 47% of deaths, hepatitis C 48% and hepatitis A and E are responsible for the remainder.

Hep B can be managed with drugs but usually need to take for life.
Questions:

Refer to figure 11.13 and describe the relationship evident in the graph. Provide one reason to explain the relationship.

Describe three actions that need to be taken to meet the SDG 3 target for malaria.

Refer to figure 11.17 and identify two trends evident in the graph. Provide one reason for each of these trends identified.

Refer to figure 11.20 and identify the neglected tropical disease that saw the greatest reduction in DALY between 1990 and 2013.
1) Figure 11.13 of the student textbook shows that, as the HIV treatment coverage with ant-retroviral drugs increased, there was a corresponding decrease in the number of AIDS-related deaths. This is because treatment with anti-retroviral drugs helps delay and sometimes prevents the progression of HIV to AIDS. ART involves a combination of three or more drugs that stops the virus from reproducing, so people with HIV can enjoy healthy lives and reduce the risk of transmitting the virus to others.

2) Actions that need to be taken to meet the SDG 3 target for malaria include:
   - Invest in healthcare and the health workforce to ensure universal access to healthcare.
   - Ensure everyone has access to insecticide-treated bed nets and indoor spraying of homes.
   - Invest in research and development of new vector control strategies to overcome anti-malarial drug resistance.
   - Find better ways to diagnose the disease and develop more effective medicines.

3) Trends evident in figure 11.17 of the student textbook include:
   - The incidence of TB per 100,000 has steadily declined between 2000 and 2015. This could be due to advances in the prevention, diagnosis and treatment of TB, particularly access to vaccination.
   - The number of notifications of new and relapsed cases of TB per 100,000 increased between 2000 and 2015. This could be due to improvements in access to diagnostic services so that cases of TB were being identified instead of going undiagnosed.
   - The number of HIV-positive cases also infected with TB per 100,000 has decreased only slightly between 2000 and 2015. This could be because a person who has contracted HIV is at greater risk of also contracting TB.
   - The death rates from TB per 100,000 have decreased between 2000 and 2015. This could be due to advances in the prevention, diagnosis and treatment of TB, particularly access to vaccination.

4) According to figure 11.20 of the student textbook, the neglected tropical disease that saw the greatest reduction in DALYs between 1990 and 2013 was Ascariasis.
SDG 3  **Good Health and Well-Being**

Ensure healthy lives and promote well-being for all at all ages

**Key Feature 3 – Non-communicable Diseases**

Cardiovascular disease, cancer, diabetes and chronic respiratory disease account for two thirds of deaths globally. Cardiovascular disease is the most common (affecting 17.5 million people), followed by cancers (8.2 million people), respiratory diseases (4 million) and diabetes (1.5 million).

Used to be thought as mainly a high income issue, however low income suffer greater BoD due to becoming ill quicker, suffering more and dying earlier.

Global marketing a factor.
SDG 3 **Good Health and Well-Being**
Ensure healthy lives and promote well-being for all at all ages

**Key Feature 3 – Non-communicable Diseases**

**Preventative measures suggested by WHO:**

- implement taxes on alcohol and tobacco products
- implement the Framework Convention on Tobacco Control
- legislation for food labels
- encourage schools and workplaces to find ways to encourage regular physical activity.
SDG 3  **Good Health and Well-Being**
Ensure healthy lives and promote well-being for all at all ages

**Key Feature 3 – Non-communicable Diseases**

**Mental Health**

- Depression top 20 leading causes of disability
- 800,000 people die a year due to suicide
- 2\textsuperscript{nd} leading cause of death in 15-29 year olds
- Can be attributed or impact other diseases
- Promotion could include: leadership from government, strategies development, more data, investment in services.

Less than half of people who suffer from depression have access to medication.

1 psychiatrist to 200,000 people
SDG 3  **Good Health and Well-Being**
Ensure healthy lives and promote well-being for all at all ages

**Key Feature 3 – Non-communicable Diseases**

- Road traffic accidents
- Drug and alcohol misuse
- Air pollution
- Water pollution

The above are other types of NCD – add a few notes from the chapter to go with these.
Describe:

• eradicating extreme poverty - people living on less than US$1.90 a day
• reducing by half the proportion of men, women and children living in poverty
• implementing social protection systems
• ensuring equal rights and access to essential resources, services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance
• building the resilience of those in vulnerable situations and reducing exposure to environmental disasters that result in poverty.

What are the causes of poverty??
SDG 1  **No Poverty**
End poverty in all its forms everywhere

Relationship to SDG 3:
To enable good health and wellbeing, poverty needs to be eradicated.

Governments in low income tend to not put as much money towards public health and wellbeing (safe water / sanitation)

Need access to free health care and access to medications

Many of the economic, sociocultural and environmental actions that need to be taken to achieve both goals require collaboration across different sectors, such as welfare, finance, legal, health, water and sanitation, and industry.
SDG 2  **Zero Hunger**
End hunger, achieve food security and improved nutrition and promote sustainable agriculture

**Describe:**
This SDG aims to **end all forms of hunger and malnutrition**, by ensuring **all people**, especially children, the poor, pregnant/lactating females, the elderly and those in vulnerable situations have **access to safe, nutritious food all year round**.

It also aims to **improve sustainable agricultural productivity** including **adapting to climate change and extreme weather conditions**.

It also aims to **address trade restrictions** that disadvantage farmers, particularly in developing countries.

**Hunger** is defined as the continuing lack of food needed for an active and healthy life.
SDG 2  **Zero Hunger**
End hunger, achieve food security and improved nutrition and promote sustainable agriculture

**Relationship to SDG 3:**
As millions of people globally still experience **chronic hunger and malnutrition**, resulting in high mortality rates, particularly for children.
Maternal and child health and wellbeing will be improved with access to nutritious foods.
Reduces risk of contracting and dying from communicable diseases.
Mother more likely to survive birth / have healthier babies.

Malnutrition and hunger results in stunting, lack of energy and weakened immune system functioning resulting in high levels of illness and disease such as diarrhoea, malaria and measles.
CASE STUDY

These hybrids will improve the lives of half a billion people

In high-income countries, most people eat the root vegetable cassava only in tapioca pudding or bubble tea. But in Africa, it’s the primary staple for half a billion people and the continent’s most popular crop. That’s why it’s super exciting that scientists are using the most advanced hybridisation techniques for the benefit of cassava farmers and those who depend on the crop. With the support of UK Department for International Development and the Gates Foundation, scientists are making great progress developing hybrids that are resistant to the major virus that cuts down on cassava yields (cassava mosaic virus). At the same time, these scientists are breeding strains that have more nutrients than the strains under cultivation today.


Case study review

1. Explain how this project will help achieve zero hunger.
2. How will this project help achieve good health and wellbeing?
3. Who are the partners involved in the development of this project?
SDG 4 **Quality Education**
Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

**Describe:**
This SDG aims to ensure **all** girls and boys have access to quality education from **pre-primary** through to **tertiary**. This means **completion** of **free** primary and secondary education.

It aims to ensure all people receive education to ensure **numeracy and literacy**, including the **vulnerable** (such as those with disabilities and indigenous peoples).

It also aims to increase **skills for employment and decent jobs**.

To ensure quality education, this SDG aims to upgrade education facilities including the supply of **qualified teachers**.

**Emphasis on the completion of 12 years of publicly funded, high-quality primary and secondary education, of which at least 9 years are compulsory.**
SDG 4  **Quality Education**
Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

**Relationship to SDG 3:**
Educated and skilled workforce = economic growth which can provide resources to invest in health care / social protection.
Health literacy = access to health services
Educating **girls** will result in a decrease in births due to health literacy which can stabilise the population. More likely to survive birth, immunise children and send them to school. Will marry later, less likely to experience sexual violence, STIs
Education = employment = nutritious food / water / clothing / shelter
SDG 5  Gender Equality
Achieve gender equality and empower all women and girls

Describe:
This SDG aims to ensure equal opportunities for both males and females in all areas of life, including leadership in decision making and access to economic and natural resources (such as owning land).

It aims to end all forms of discrimination, violence and harmful practices against all girls and women everywhere (including trafficking, forced marriage, FGM).

It also aims to ensure universal access to sexual and reproductive health and rights.

AIMS for the SAME level of POWER.

Tend to undertake almost 80% of the unpaid work.

Women earn 10-30% less.

One in three women worldwide has been subject to physical or sexual violence.
SDG 5  **Gender Equality**  
Achieve gender equality and empower all women and girls

**Relationship to SDG 3:**

- Providing women and girls with **equal access to education, health care, decent work, and representation in political and economic decision-making processes** will contribute to sustainable economies.
- Small loans and controlling water / sanitation have been shown to be more effective with women than men.
- Can increase all aspects of health & wellbeing.

**TASK:** highlight how SDG 5 enhances all aspects of health & wellbeing.
SDG 6 **Clean Water and Sanitation**
Ensure availability and sustainable management of water and sanitation for all

**Describe:**
This SDG aims to achieve universal access to **safe drinking water and sanitation** for all people.
It aims to improve **water quality** by reducing contaminants as well as increase **water-use efficiency** to promote sustainability.
It also aims to support the participation of **local communities** in improving water and sanitation management.
Reduces risk of communicable and non-communicable diseases.
1000 children die every day from diarrhoea caused by contaminated water and poor sanitation.

Each person requires 20–50L of water for drinking, cooking and hygiene **each day**.
Since 1990, 1.9 billion people gained access to safe drinking water.
SDG 6 **Clean Water and Sanitation**

Ensure availability and sustainable management of water and sanitation for all

**Relationship to SDG 3:**

As millions of people globally lack access to clean, safe water and sanitation, resulting in preventable illness and high mortality rates, particularly among children and mothers.

In low- and middle-income countries, 38% of healthcare facilities lack any water source, 19% do not have improved sanitation and 35% lack water and soap for hand washing.

The potential global economic gains from investing in sanitation and water are estimated to be $260 billion per year.

Every $1 spent on sanitation brings a $5.50 return from keeping people healthy and productive = economic growth.
SDG 13  **Climate Action**
Take urgent action to combat climate change and its impacts

**Describe:**
This SDG aims to take urgent action to combat climate change.
Strengthen the resilience of countries to disasters.
Improve environmental education.
Integrate environmental concerns into policies and planning.
Between 1990 and 2013, more than 1.6 million people died due to natural disasters thought to be climate related and these numbers are increasing each year.
Climate change = increased: infectious diseases (heat & humidity), allergies, asthma, CV and respiratory diseases, hunger, malnutrition.

More than half of the world’s population lives within 60km of the coast.
SDG 13 **Climate Action**
Take urgent action to combat climate change and its impacts

**Relationship to SDG 3:**
Cleaner energy systems, promoting energy efficient public transport and alternatives, such as cycling or walking, rather than private vehicles, could reduce carbon emissions and air pollution, all of which would help reduce current morbidity and mortality rates due to communicable diseases and a range of non-communicable diseases.

Ending the epidemics of infectious diseases cannot be achieved if climate change produces conditions that increase the risk of these diseases.

**Question:**
Why would the establishment of a Green Climate Fund be important for acting on climate change?