Environmental Education Project **OZONE DEPLETION** submitted to Fatima College, (Autonomous), Madurai, as partial fulfillment of the degree of Bachelor of History for the academic year 2023-2024

Subject code: 19G4EE

Submitted by

II-BA HISTORY

R.DHARSHINI	(2022H06)
M.GATLIN SWETHA	(2022H07)
S.HARSITHA	(2022H08)
V.S.HINDUJA	(2022H09)
R.IAKKIYA JOTHI	(2022H10)

Fatima College (Autonomous)

Re-Accredited with 'A++° Grade by NAAC (IV -Cycle)

College with Potential for Excellence (2004-2019)

74 Ranking in India 2020(NIRF) by MHRD

Certificate

This is to certify that the project entitled "Ozone Depletion" has been satisfactorily completed by 2022H06 R.Dharshini, 2022H07 M.Gatlin Swetha , 2022H08 S.Harsitha, 2022H09 V.S.Hinduja, 2022H10 R.Ilakkiya Jothi ,of II nd B.A.History,studing in Fatima College,(Autonomous), Madurai under my guidance as partial fulfillment of the Environmental Education component during the academic year 2023-2024

Place:Madurai

Date: 16.10.2023

Signature of the Head of Department 16/10/23

(Dr.P.Parameswari)

FATIMA COLLEGE (AUTONOMOUS)

Re-Accredited with 'A++' by NAAC (Cycle – IV)

Mary Land, Madurai

To Whomsoever It May Concern

This is to certify that the following students have completed their student project work under the guidance of Dr.P.Parameswari Assistant Professor of History for the Academic Year 2023-2024

SNO	REG NO	NAME OF THE STUDENT	TITLE OF THE PROJECT
1.	2022H06	R.Dharshini	OZONE DEPLETION
2.	2022H07	M.Gatlin swetha	OZONE DEPLETION
3.	2022H08	S.Harsitha	OZONE DEPLETION
4.	2022H09	V.S.Hinduja	OZONE DEPLETION
5.	2022H10	R.Iakkiya Jothi	OZONE DEPLETION

Project Guide: Dr.P.Parameswari

Co-Ordinator
Environmental
Studies&GenralStudies

Declaration

We hereby state that the project entitled "Ozone Depletion" is a record of our independent work and it had not been previously done for the award of any degree, fellowship or any other similar title

Yours faithfully,

Place:Madurai

Date: 16.10.2023

R. DHARSHINI (2022H06) R. Dharshini

M. GATLIN SWETHA (2022H07) M. Gatlin Swetha

S. HARSHITHA (2022H08) S. Harshitha

V.S. HINDUJA (2022H09) V.S Hindija

R ILAKKIYA JOTHI (2022H10) R. Ilakkiya Jothi

OZONE DEPLETION

Introduction

The ozone layer is a region in the earth'stratosphere that contains high concentration ozone and proctects the earth from the harmful ultraviolet radiations o the sun.The ozone layer is mainly found in the lower portion of the earth's atmosphere. It has the potential to absorb around 97-99% of the harmful ultraviolet radiations coming from the sun that can damage life on earth. If the ozone layer was absent, millions of people would develop skin diseases and may have weakened immune systems[1]. However, scientists have discovered a hole in the ozone layer over Antarctica. This has focussed their concern on various environmental issues and steps to control them. The main reasons for the ozone hole are chlorofluorocarbons, carbon tetrachloride, methyl bromide and hydrochlorofluorocarbons.

Ozone Layer Depletion

Ozone layer depletion is the gradual thinnings of the earth's ozone layer in the upper atmosphere caused due to the release of chemical compounds containing gaseous bromine or chlorine from the industries or other human activites Ozone layer depletion is the thinning of the ozone layer present in the upper atmosphere. This happens when the chlorine and bromine atoms in the atmosphere come in contact with ozone and destroy the ozone molecules. One chlorine can destroy 100,000 molecules of ozone.

[1] It protects your body from harmful substances, germs and cell changes that could make you ill. It is made up of various organs, cells and proteins. As long as your immune system is running smoothly

Environmental Education Project **"SOIL REVITALISATION"** submitted to Fatima College. (Autonomous) Madurai, as partial fulfillment of the degree of Bachelor of History for the academic year 2023-2024

Subject Code: **23G3EE1**

Submitted by

II-BA HISTORY

V.Kaviya	(2022H12)
N.Krithika	(2022H13)
M.Malathi	(2022H15)
K.Manimegalai	(2022H16)
J.Meenakshi	(2022H17)

FATIMA COLLEGE (AUTONOMOUS)
Re-Accredited with 'A++' by NAAC (Cycle – IV)
Mary Land, Madurai-18

Certificate

This is to certify that the project entitled "Soil Revitalisation" has been satisfactorily completed by 2022H12 V.Kaviya, 2022H13 N.Krithika, 2022H15 M.Malathi, 2022H16 K,Manimegalai, 2022H17 J.Meenakshi of II-BA History studying in Fatima College (Autonomous), Madurai under my guidance as partial fulfilment of the Environmental Education component during the academic year 2023-2024.

Place: Madurai

Date: 16.10.2023

Signature of the Head of Department

18/10/23

Project Guide

(Dr.P.Parameswari)

Declaration

We hereby state that the Project entitled "Soil Revitalisation" is a record of our independent work and it has not been previously done for the award of any degree, fellowship or any other similar title.

Yours faithfully,

Place: Madurai

Date: 16.10.2023

V. KAVIYA (2022H12)

N. KRITHIKA (2022H13)

M. MALATHI (2022H15)

K. MANIMEGALAI (2022H16)

J. MEENAKSHI (2022H17)

FATIMA COLLEGE (AUTONOMOUS)
Re-Accredited with 'A++' by NAAC (Cycle – IV)
Mary Land, Madurai

To Whomsoever It May Concern

This is to certify that the following students have completed their student project work under the guidance of Dr. P. Parameswari, Assistant Professor of History for the Academic Year 2023-2024.

Sl. No.	Reg. No.	Name of the Students	Title of the project
1.	2022H12	V.Kaviya	Soil revitalization
2.	2022H13	N.Krithika	Soil revitalization
3.	2022H15	M.Malathi	Soil revitalization
4.	2022H16	K.Manimegalai	Soil revitalization
5.	2022H17	J.Meenakshi	Soil revitalization

Project Guide: **Dr.P.Parameswari**

Co-Ordinator,
Environmental Studies & Gender Studies

CONTENTS

Introduction

This project emphasises on the importance of non-renewable resource, i.e, soil. Being an essential element for producing all edible things and to perform all kinds of terrestrial activities. It is important to have a look over soil and it's pity degrading conditions. It is vital to rejuvenate and replenish the soil nutrients for further usage and future generations. Ensuring that our soil is rich and fertile is key to avoiding an ecological disaster.

SOIL REVITALIZATION

Environmental Education Project "Water Resource Management" submitted to Fatima College.(Autonomous)Madurai, as partial fulfillment of the degree of Bachelor of History for the academic year 2023 – 2024

Subject code : 23G3EE1

Submitted by

II – BA HISTORY

N. Mythili	(2022H18)
T. Nithiya	(2022H19)
P. Parkavi	(2022H20)
R. Pothum Ponnu	(2022H21)
P.Prisha Mary	(2022H22)
G.Priyaveni	(2022H23)

FATIMA COLLEGE (AUTONOMOUS)

Re – Accredited with 'A++'Grade by NAAC (Cycle – IV)

College with Potential for Excellence (2004 – 2019)

74 Ranking in India 2020 (NIRF) by MHRD

Certificate

This is to certify that the project entitled " Water Resourse Management" has been satisfactorily completed by 2022H18 N.Mythili, 2022H19 T.Nithiya, 2022H20 P.Parkavi, 2022H21 R.Pothum Ponnu, 2022H22 P.Prisha Mary, 2022H23 G.Priyaveni of II- BA History Studying in Fathima College (Autonomous) Madurai under my guidance as parial fulfilment of the Enviromental Education Component during the academic Year 2023-2024.

Place : Madurai

Date : 16.10.2023

Project guide

Dr.P.Parameswari

18/10/23

Signature of the Head of Department

Declaration

We hereby state that the Project entitled " Water Resource Management" is a record of our independent work and it has been previously done for the award of any degree, fellowship or any other similar title.

Yours Faithfully,

Place : Madurai

Date : 16.10.2023

N. MYTHILI (2022H18) N. Mythili

T. NITHIYA (2022H19) T. Nithiya.

P. PARKAVI (2022H20) P. Parkavi

R. POTHUM PONNU (2022H21) R. Pothumponnu.

P. PRISHA MARY (2022H22) P. Prisha

G. PRIYAVENI (2022H23) G. Priyaveni.

FATHIMA COLLEGE (AUTONOMOUS)

Re-Accredited with 'A++'by NAAC(Cycle - IV)

Mary Land, Madurai

To Whomsoever It May Concern

This is to certify that the following students have completed their student project work under the guidance of Dr.P.Parameshwari Assistant Professor of History for the Academic Year : 2023 - 2024

SI.NO	Reg.No	Name of the Students	Title of the Project
1.	2022H18	N. Mythili	Water resource Mangement
2.	2022H19	T.Nithiya	Water resource Management
3.	2022H20	P.Parkavi	Water resource Management
4.	2022H21	R.Pothum Ponnu	Water resource Management
5.	2022H22	P.Prisha Mary	Water resource Management
6.	2022H23	G.Priyaveni	Water resource Management

Project Guide

Co-Ordinator

Environmental

Studies & Gender Studies

Water Resources

Introduction

Water Resources Management (WRM) is the process of planning, developing, and managing water resources, in terms of both water quantity and quality, across all water uses. It includes the institutions, infrastructure, incentives, and information systems that support and guide water management.

Types of Water Management

Water resource management traditionally involves managing water storage and water flows. Clients will need to invest in institutional reinforcement, information management, and (natural and man-made) infrastructure development to enhance water security against this backdrop of rising demand, water scarcity, growing uncertainty, greater extremes, and fragmentation challenges.

Information systems are needed for resource management, uncertain decision taking, system analysis and hydro-meteorological forecasting and warning. Investments in advanced technology to improve efficiency, preserve and protect energy, recycle storm water and wastewater and establish non-conventional water sources should be explored in addition to finding opportunities for improved water storage, including regeneration and recovery of aquifers.

Environmental Education Project on **Awareness on Biodiversity Loss Among Upcoming Generations** submitted to Fatima College, (Autonomous), Madurai, as partial fulfillment of the degree of Bachelor of History for the

Academic year 2023-2024.

Subject code: 19G4EE

Submitted by **II B.A HISTORY**

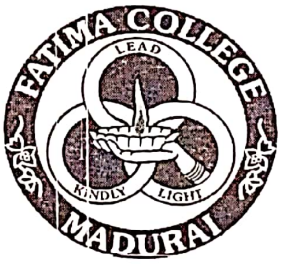
1.T. Pushpanjali - 2022H24

2. A. Rajashree - 2022H25

3.P. Rajeswari - 2022H26

4. M. Ramya - 2022H27

5. M. Seetha Lakshmi - 2022H29



Fatima College (Autonomous), Madurai

Re-Accredited with 'A++' Grade by NAAC (IV-Cycle)

College with Potential for Excellence (2004-2019)

74 Ranking in India 2020(NIRF) by MHRD.

Environmental Education Project on **Awareness on Biodiversity Loss Among Upcoming Generations** submitted to Fatima College, (Autonomous), Madurai, as partial fulfillment of the degree of Bachelor of History for the

Academic year 2023-2024.

Subject code: 19G4EE

Submitted by **II B.A HISTORY**

1.T. Pushpanjali - 2022H24

2. A. Rajashree - 2022H25

3.P. Rajeswari - 2022H26

4. M. Ramya - 2022H27

5. M. Seetha Lakshmi - 2022H29

Fatima College (Autonomous), Madurai

Re-Accredited with 'A++° Grade by NAAC (IV -Cycle)

College with Potential for Excellence (2004-2019)

74 Ranking in India 2020(NIRF) by MHRD.

Certificate

This is to certify that the project entitled **Awareness on Biodiversity Loss Among Upcoming Generations** has been satisfactorily completed by: A.Rajashree[2022H25],T.Pushpanjali[2022H24],P.Rajeswari[2022H26]M.Ramya[2022H27], M.Seethalakshmi [2022H29], of II B.A., History, studying in Fatima College. (Autonomous), Madurai under my guidance as partial fulfillment of the Environmental Education component during the academic year 2023-24.

Place: Madurai

Date: 16.10.2023

16.10.23

Signature of the Head of Department

(Dr. P. Parameswari)

Co-Ordinator,
Environmental & gender studies

Declaration

we hereby state that the project entitled is "**Awareness on Biodiversity Loss Among Upcoming Generations** "a record of our independent work and it has not been previously done for the award of any degree, fellowship or any other similar title.

Yours faithfully,

T. PUSHPANJALI (2022H24) T. Pushpanjali

A. RAJASHREE (2022H25) A. Rajashree

P. RAJESWARI (2022H26) P. Rajeswari

M. RAMYA (2022H27) M. Ramya

M. SEETHA LAKSHMI (2022H29) M. Seetha Lakshmi

Place: Madurai

Date: 16.10.2023

Awareness On Biodiversity Loss Among Upcoming Generations

INTRODUCTION:

Biodiversity is the degree of variation of life forms within a given species, ecosystem, biome, or an entire planet. Biodiversity is a measure of the health of ecosystems. Biodiversity is in part a function of climate. In terrestrial habitats, tropical regions are typically rich whereas polar regions support fewer species. Rapid environmental changes typically cause mass. extinctions. One estimate is that less than 1% of the species that have existed on Earth are extant.

Since life began on Earth, five major mass extinctions and several minor events have led to large and sudden drops in biodiversity. The Phanerozoic eon (the last 540 million years) marked a rapid growth in biodiversity via the Cambrian explosion-a period during which nearly every phylum of multicellular organisms first appeared.[1]

The next 400 million years included repeated, massive biodiversity losses classified as mass extinction events. In the Carboniferous, rainforest collapse led to a great loss of plant and animal life. The Permian-Triassic extinction event, 251 million years ago, was the worst; vertebrate recovery took 30 million years. The most recent, the Cretaceous-Tertiary extinction event, occurred 65 million years ago, and has often attracted more attention than others because it resulted in the extinction of the dinosaurs. The period since the emergence of humans has displayed an ongoing biodiversity reduction and an accompanying loss of genetic diversity. Named the Holocene extinction, the reduction is caused primarily by human impacts, particularly habitat destruction. Conversely, biodiversity impacts human health in a number of ways, both positively and negatively.

The United Nations designated 2011-2020 as the United Nations Decade on Biodiversity

Definitions

[1] www.byjus.com

Environmental Education Project "Climate Change After COVID - 19" submitted to Fatima College.(Autonomous)Madurai, as partial fulfillment of the degree of Bachelor of History for the academic year 2023 – 2024

Subject code : 23G3EE1

Submitted by

II – BA HISTORY

B.Shobana	(2022H31)
S.Aarifa	(2022H40)
S.Tejaswini	(2022H41)
P.Sudharsana	(2022H42)
K.Maheswari	(2022H43)

FATIMA COLLEGE (AUTONOMOUS)

Re – Accredited with 'A++'Grade by NAAC (Cycle – IV)

College with Potential for Excellence (2004 – 2019)

74 Ranking in India 2020 (NIRF) by MHRD

Certificate

This is to certify that the project entitled "Climate Change After COVID -19" has been satisfactorily completed by 2022H31 D.Shobana, 2022H40 S.Aarifa, 2022H41 S.Tejaswini, 2022H42 P.Sudharsana, 2022H43 K.Maheswari, of II- BA History Studying in Fathima College (Autonomous) Madurai under my guidance as parial fulfilment of the Enviromental Education Component during the academic Year 2023-2024.

Place : Madurai

Date : 16.10.2023

Project guide

Dr.P.Parameswari

18/10/23

Signature of the Head of Department

Declaration

We hereby state that the Project entitled " Climate Change after COVID -19" is a record of our independent work and it has been previously done for the award of any degree, fellowship or any other similar title.

Yours Faithfully,

Place : Madurai

Date : 16.10.2023

D. SHOBANA (2022H31) D. Shobana

S. AARIFA (2022H40) S. Aarifa

S. TEJASWINI (2022H41)

P. SUDHARSANA (2022H42) P. Sudharsana.

K. MAHESWARI (2022H43). K. Maheswari

FATIMA COLLEGE (AUTONOMOUS)

Re - Accredited with 'A++' by NAAC (Cycle - IV)

Mary Land, Madurai

To Whomsoever It may concern

This is to certify that the following students have completed their student project work under the guidance of Dr.P.Parameswari, Assistant Professor of History for the Academic year: 2023- 2024.

S.No	Reg.No	Name of the Students	Title of the Project
1	2022H31	D. Shobana	Climate Change after COVID- 19
2	2022H40	S. Aarifa	Climate Change after COVID- 19
3	2022H41	S. Tejaswini	Climate Change after COVID- 19
4	2022H42	P. Sudharsana	Climate Change after COVID- 19
5	2022H43	K. Maheswari	Climate Change after COVID- 19

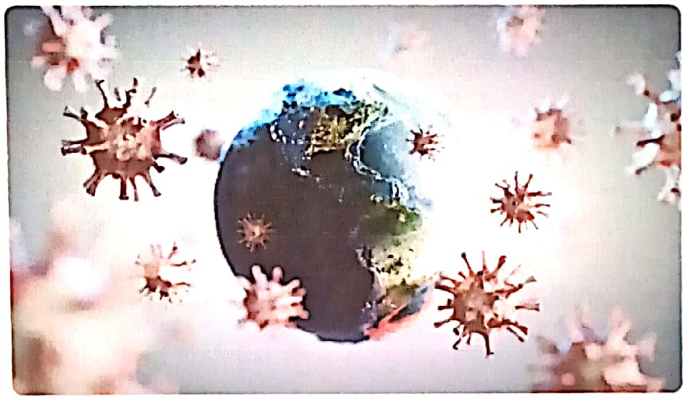
Project Guide: **Dr.P.Parameswari**

Co-ordinator
Environmental studies & General studies

CLIMATE CHANGE AFTER COVID19

Introduction

The COVID19 pandemic has hit our world on a scale beyond living memory, taking millions of lives and leading to a lockdown of communities worldwide. A pandemic, much like a climate change , acts as a threat multiplier, increasing vulnerability to harm, economic impoverishment, and the breakdown of social systems. Even more concerning, communities severely impacted by the coronovirus still remain vulnerable to others types of hazards, such as those brought by accelerating climate change. The catastrophic risks of pandemics and climate change carry deep uncertainity as to when they will occur, how they will unfold, and how much damage they will do .



Environmental Education Project on **MUNICIPAL WASTE DISPOSAL MANAGEMENT IN MADURAI** submitted to Fatima College, (Autonomous), Madurai, as partial fulfillment of the degree of Bachelor of History for the

Academic year 2023-2024.

Subject code: 19G4EE

Submitted by **II B.A HISTORY**

1. Sudha rani - 2022H33
2. Sujitha - 2022H34
3. Suryaprabha - 2022H35
4. Thabitha Suji - 2022H36
5. Tharanya - 2022H37
6. Arokiya nisa - 2022H38

Fatima College (Autonomous)

Re-Accredited with 'A++° Grade by NAAC (TV -Cycle)

College with Potential for Excellence (2004-2019)

74 Ranking in India 2020(NIRF) by MHRD.

Certificate

This is to certify that the project entitled "**WASTE DISPOSAL**" has been satisfactorily completed by Sujitha [2022H34], Sudharani [2022H33], Surya Prabha [2022H35], Thabitha Suji [2022H36], Tharanya [2022H37], Arokiya Nisha [2022H38] of II B.A., History, studying in Fatima College. (Autonomous), Madurai under my guidance as partial fulfillment of the Environmental Education component during the academic year 2021-22.

Place: Madurai

Date: 16.10.2023

16/10/23

Signature of the Head of Department

(Dr. P. Parameswari)

~~Co-Ordinator~~,
Environmental & ~~gender~~ studies

Declaration

we hereby state that the project entitled "waste disposal" is a record of our independent work and it has not been previously done for the award of any degree, fellowship or any other similar title.

Yours faithfully,

SUDHA RANI (2022H33) A. Sudha Rani

SUJITHA (2022H34) V. Sujitha

SURYA PRABHA (2022H35) A. Surya

THABITHA SUJI (2022H36) J. Thabitha Suji

THARANYA (2022H37) S. Tharanya

AROKIYA NISA (2022H38) Arokiya Nisha

Place: Madurai

Date: 16.10.2023

Municipal waste disposal management in Madurai:

Introduction:

This is a collection of information about waste disposal management that we are seeing daily at Madurai .It gives you clarified view about what is being done around us. It also teaches how to dispose waste at Homes, schools, industries and factories. It also enriches the uneducated people with knowledge of sanitation and disposal of waste.

Waste disposal:

Introduction of Waste Disposal:
Municipal liquid waste is channeled through sewage systems in developed countries, where it is treated as wastewater or sewage. Before wastewater, or sewage, may enter groundwater aquifers or surface waters like rivers, lakes, estuaries, and seas, this procedure eliminates most or all of the contaminants.

Municipal solid waste (MSW), commonly known as refuse is non-hazardous garbage that must be collected and transferred to a processing or disposal facility. Garbage and waste are examples of refuse. Garbage consists primarily of compostable food waste and dry materials such as glass, paper, cloth, or wood. Garbage, on the other hand, is extremely putrescible and decomposable, but trash is not. Bulky goods like old refrigerators, couches, and massive tree stumps, as well as building and demolition waste (e.g., wood, drywall, bricks, concrete, and rebar a steel rod with ridges for use in reinforced concrete), all of which require special collection and processing, are considered trash. Sanitary landfills—pits or other places covered with impermeable synthetic bottom liners where garbage is segregated from the rest of the environment—are frequently used to dispose of refuse.

What is Waste Disposal?
Waste disposal means removing, discarding, recycling or destroying unwanted materials called waste that is produced from agriculture, domestic usage or industrial products. Following the correct methods for waste disposal will ensure lesser pollution and hazards for the environment. Proper waste management is necessary with steps involving the proper collection of waste and scientific

Environmental Education Project "**Solution for flood issues**" submitted to Fatima college.(Autonomous) Madurai, as partial fulfilment of the degree of bachelor of History for the academic year 2023-2024

Subject Code : **23G3EE1**

Submitted by

II-BA HISTORY

U.Ajitha	(2022H01)
E.Archana	(2022H03)
S.Asha	(2022H04)
K.Bhuvaneswari	(2022H05)

FATIMA COLLEGE (AUTONOMOUS)

Re-Accredited With 'A++' by NAAC (Cycle –IV)

Mary Land, Madurai-18

Certificate

This is to certify that the project entitled "**Solution for flood issuse**" has been satisfactorily completed by 2022H01 U.Ajitha, 2022H03 E.Archana, 2022H04 S.Asha, 2022H05 K.Bhuvaneswari of **II-BA History** studying in Fatima college (Autonomous), Madurai under my guidance as parial fulfilment of the Environmental Education component during the academic year 2023-2024.

Place: Madurai

Date: 16.10.2023

Signature of the Head of Department

18.10.23

Project Guide

(Dr.P.Parameswari)

Declaration

We hereby state that the Project entitled " Solution for flood issues" is a record of our independent Work and it has not been previously done for the award of any degree, fellowship or any other similar title.

Yours faithfully,

Place: Madurai

Date: 16.10.2023

U. AJITHA (8088HO1) U. Ajitha

E. ARCHANA (8088HO3) E. Archana.

S. ASHA (8088HO4) S. Asha.

K. BHUVANESWARI (8088HO5) K. Bhuvana

FATIMA COLLEGE (AUTONOMOUS)

Re-Accredited With 'A++' by NAAC (Cycle –IV)

Mary Land, Madurai

TO Whomsoever It May Concern

This is to certify that the following students have Completed their student project work under the guidance of Dr . P. Parameswari, Assistant Professor of History for the academic year 2023-2024.

Sl.NO	Reg. No.	Name of the Students	Tittle of the project
1.	2022H01	U.Ajitha	Solution for flood issues
2.	2022H03	E.Archana	Solution for flood issues
3.	2022H04	S.Asha	Solution for flood issues
4.	2022H05	K.Bhuvaneswari	Solution for flood issues

Project Guide: Dr. P. Parameswari

Co- Ordinator,
Environmental Studies& Gender Studies

Introduction

Flood risk management as a process has been discussed extensively, (UNDRO, more 1991; Plate, 1997) without regard to the actors involved in the process. It is useful to interpret risk management as a process which involves three different sets of actions, depending on the operators involved. The first is the set of actions which are needed to operate an existing system.

It consists of four parts, as will be described briefly in the second chapter. When the system is no longer adequate to meet the needs of people—for example, because of changes in land use, increases in population, or climate change—then the next set of namely those that are called to do the designing and building of a flood protection system, once it has been decided that such a system is to be built.

In a modern framework of design, this task can also be very demanding, as it is required to do such engineering job in a most efficient way and including a thorough assessment of the safety of the engineered system against failure. On a higher level, however, the engineering approach must be seen as embedded in the decision process of planning for flood risk management. Not only engineers are involved in this process, but also many social groupings of a society, from political decision makers to people that are directly exposed to floods.