

# From Sydney to Sierra Leone – The Travels of NSW First Fleet Surveyor William Dawes. By John F. Brock

## ABSTRACT

“... one of the excellent of the earth.” of Dawes by Zachary Macauley.

Dawes Point under Sydney Harbour Bridge is named after him but few really know exactly who William Dawes was. In this paper you will meet the man responsible for building the first observatory on the site named after him which he had originally called Maskelyne Point for the British Astronomer Royal. You will be amazed by his

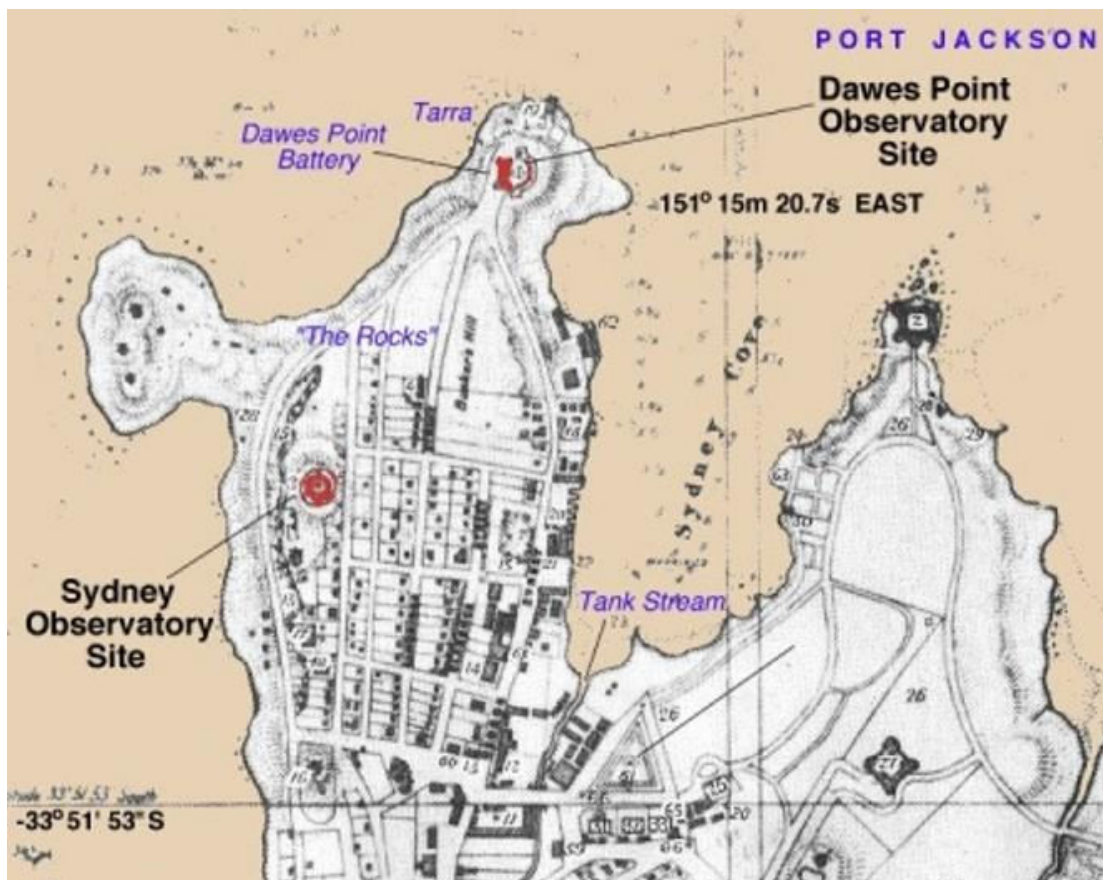


Figure 1: Map of part of Sydney Harbour showing the locality of Dawes Point Observatory site now under the southern approach to the Sydney harbour Bridge.

world travels after his few years surveying and star gazing in Sydney where he ends up on the opposite side of the world in Sierra Leone to serve three terms as Governor then moves again to Antigua in the West Indies where he passes away in 1836.

Staying in New South Wales for just short of the first four years of its settlement Dawes was a defiant character cognizant of the upheaval inflicted upon the indigenous Australians suffering under the onslaught of what they perceived as an invasion. His interaction and concern for the local Aboriginals was demonstrated in his refusal to join a punitive party sent to avenge the slaying of a farmer in direct insubordination of the order of Governor Phillip. His notes on the local tribes and their language has survived as a valuable and rare resource of the indigenous culture and spoken tongue. Watkin Tench speaks of the skill of Dawes in estimating the distances travelled by uncannily accurate pacing on their various expeditions which opened up the outer regions radiating from the central township areas. On some of these exploratory trips the Governor himself took part along with other notable early colonial identities like John Hunter, William Gore, David Collins and Aboriginal guides like Colebee and Bennelong. Tench describes that Dawes had the assignments of marking out the proposed townships of Sydney and Parramatta due to his skills as a surveyor as well as possessing some useful training as an engineer for other duties.

Despite his short stay in Sydney the contribution of William Dawes was considerable. Some details of his early life before embarking on the *Sirius* then his life becoming Governor of Sierra Leone and final days in Antigua will also be highlighted so that the elusive history of one of Australia's lesser known characters can be outlined for your surprise and enlightenment. From my perspective it makes me proud to bring to the attention of lovers of early colonial history another man whose surveying talents were fruitful in the ordered and thoughtful development of the colony in its earliest years so that we can enjoy the wonderful lifestyle currently enjoyed by us all today. Adding to his mystique, his three terms as Governor of Sierra Leone during its infant period of development make an unbelievable tale evolve into an incredible example of an individual striving to better his community for all of those growing up within it.

## INTRODUCTION

William Dawes was born in 1762 at Portsmouth, Hampshire, England, said to be the eldest son of Benjamin and Elizabeth Dawes, baptized on 17 March 1762 at St. Thomas's Portsmouth. His father was the Clerk of Works at the Ordnance Office there. On September 2, 1779 he was gazetted as Second Lieutenant in the Royal Marines to serve on the *Resolution* in the action between Admiral Graves and the French Fleet commanded by Comte de Grasse, during which he was wounded. In 1787 he was appointed as Secretary to Admiral Arthur Phillip who had been selected in that year to take a fleet of 11

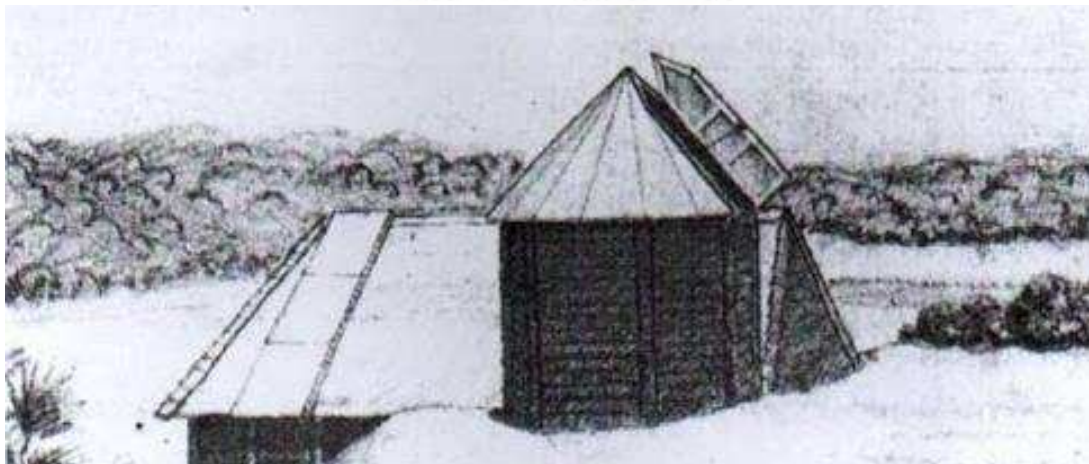
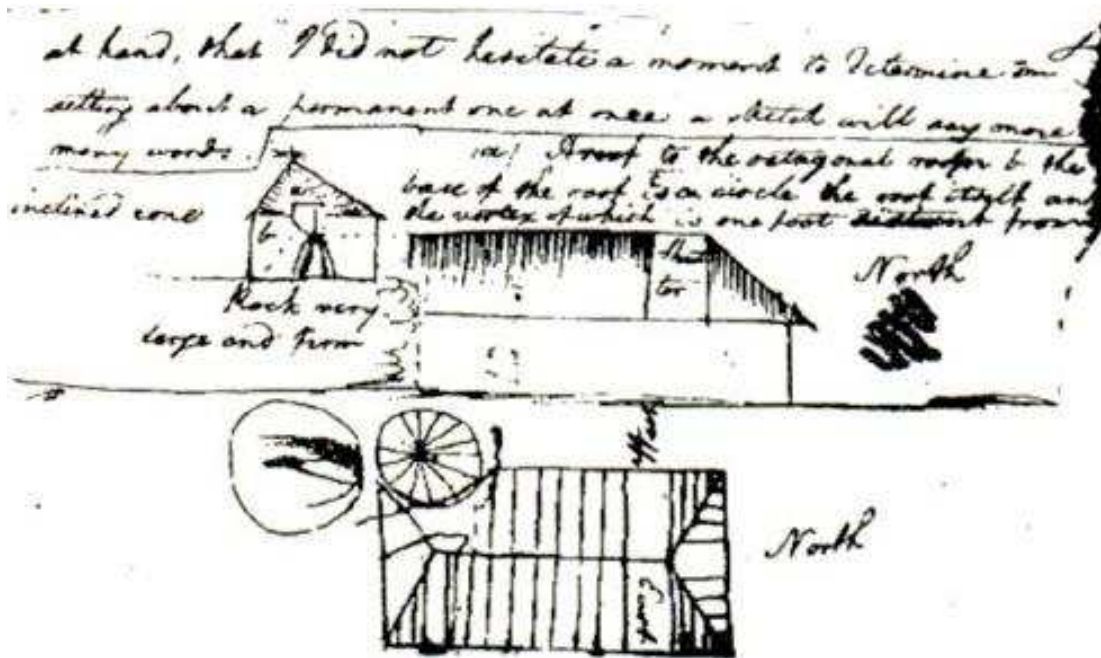


From Sydney to Sierra Leone - The Travels of NSW First Fleet Surveyor William Dawes (1767-1800).  
John Brock (Australia)

ships to New South Wales to found the First Settlement there. He was on the ship *Sirius*, being commander of this vessel. The group of eleven vessels was called the First Fleet with two of these being the King's ships, *Sirius* and *Supply*, along with nine transports, carrying 196 marines with three Officers, besides seaman and convicts. Leaving from Spithead in May 1787 they reached Botany Bay on 25<sup>th</sup> January, 1788. Finding this location unsuitable due to poor soil and inadequate fresh water supply, Phillip took his fleet northwards and in through the heads of Port Jackson to finally settle his band of new colonists at Camp Cove on 26<sup>th</sup> January, 1788, not far from what would later be renamed Dawes Point after the hero of our story.

### SETTING UP THE TIMBER FIRST OBSERVATORY IN THE ROCKS

One of his first actions in Sydney town was to set up the first observatory on what he called Maskelyne Point after the Astronomer Royal Nevil Maskelyne. From his equipment list Dawes brought with him the second theodolite to be used in Australia and the first to be



From Sydney to Sierra Leone - The Travels of NSW First Fleet Surveyor William Dawes (12679)  
John Brock (Australia)

FIG Working Week 2024

Figure 3: Dawes's sketch plan of the first observatory (top) and an artist's impression of how the building may have looked.  
Your World, Our World: Resilient Environment and Sustainable Resource Management for all  
Accra, Ghana, 19-24 May 2024



stationed in Sydney. Lieutenant James Cook had included a theodolite as part of his instrument itinerary on *The Endeavour* in 1770. Along with this land surveyor's device both Cook and Dawes also included a Gunter's chain on their equipment request lists, which are 100 links long (66 feet – 20.117 metres), and were employed to make measurements over the land. Such survey gear was not suitable for measurements at sea where a sextant or quadrant were the devices of use.

During his time in the observatory Dawes made copious recordings of atmospheric pressure, wind speed, rain and temperatures while also making thousands of astronomical observations and discovering new planetary bodies in the southern hemisphere not before known to science. Unfortunately, not long after Dawes left NSW in December 1791 the timber structure fell prey to the ravenous southern termites and it needed to be demolished. Some of the surviving astro instruments are now housed in the Sydney Observatory, just south of where they had first been utilized, before this having been transferred to Governor Brisbane's observatory at Parramatta, 20 kilometres to the west.

### LIAISING WITH LA PEROUSE'S ASTRONOMER



Figure 4: Portrait of Joseph Lepaute La Dagelet - the astronomer with the La Perouse Expedition.

Sent with Philip Gidley King to confer with La Perouse in Botany Bay on *L'Astrolabe* and *La Boussole*, Dawes struck up a relationship with the expedition's astronomer Joseph Lepaute La Dagelet who sent him a letter dated 3 March 1788 before their departure. The Frenchman had observed and calculated the latitude and longitude of Botany Bay relative to his reference meridian which passed through Paris, but then made the correction to bring the astro resolutions in line with the Greenwich Meridian so that Dawes could make a direct comparison with his own determinations. The French ships left New South Wales on 10 March, its company never to be seen again after their shipwrecks were found some 40 years later in the Solomon Islands around Vanikoro. There is a brilliant museum at the Sydney seaside suburb named after the Comte De La Perouse which has many exhibits relating to the French exploration of Australia in addition to having a memorial to the French explorers funded by Antoine De Bougainville together with a grave monument to the French priest who died not long after their arrival, Pere Le

Receveur.

## STUDY OF THE INDIGENOUS LANGUAGE

Dawes formed a relationship with a young indigenous woman named Patyegeerang with whom he was able to compile a comprehensive list of the native words with their meanings, obviously only spelling them from his interpretation of the spoken words of the first peoples, the language of whom did not have written form. It is nevertheless an invaluable and rare example of such contemporary cooperation between Australia's first tribal groups and the English settlers. His notebook was titled "Grammatical Forms of the Language of N.S. Wales in the neighbourhood of Sydney in the Year 1790."

## EXPLORING FOR ARTHUR PHILLIP AND SURVEYING WORK

Having accompanied Dawes on some of his explorations another early colonial journalist and author, Watkin Tench, declared him to be the best exponent of the technique of determining distance by pacing in the colony. He made the first attempt to cross the Blue Mountains leading a party in December 1789, but was only able to penetrate some 15 miles (24 kms) in three days due to the precipitous ravines. Soon after this he and Tench explored the upper Nepean River, opened the route to the Cowpastures in the south and participated in numerous other journeys radiating out from Sydney to the Warragamba River and Richmond.

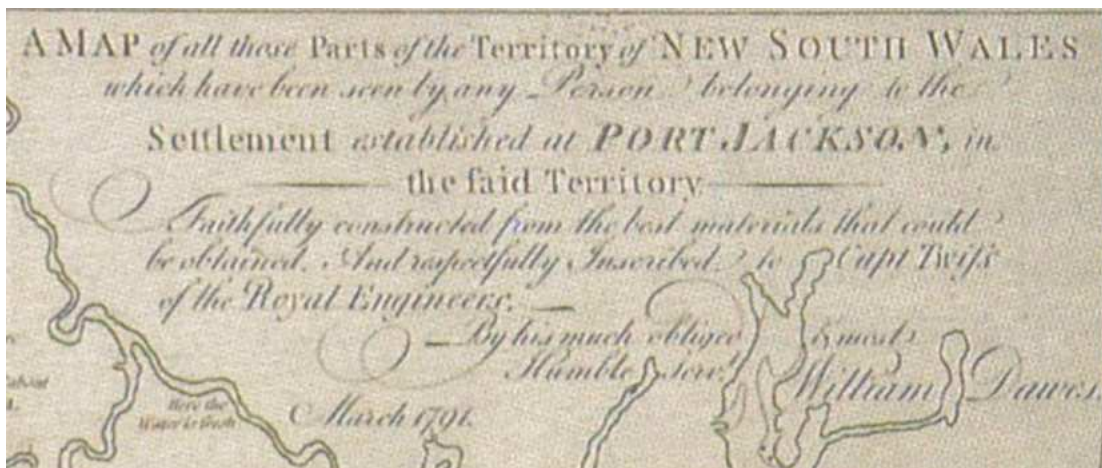


Figure 5: Title block of Dawes map of the settled areas of New South Wales from 1790.

When he was not exploring or star gazing, he was engaged in carrying out surveys in the new settlement. As engineer and surveyor he constructed batteries on the points of entry to Sydney Cove, laid out the Government Farm along with the first streets and allotments in Sydney and Parramatta. He was also given the duty to construct homes for the Surveyor-General Augustus Alt and the Chaplain Richard Johnson in the area of Sydney where now the Old Department of Lands building stands in Bridge Street, Sydney, which showcases statues of early colonialists along its three storey façade who were involved in exploration, surveying and land administration in the new colony.

## DISPUTES WITH THE NSW GOVERNOR

After the gamekeeper James MacIntyre was killed by Aboriginals who speared him, Phillip ordered a punitive expedition during which he is alleged to have demanded that “they bring back heads!” Due to Dawes’s humanitarian principles he initially refused to join the retributive party, but was eventually persuaded to take part by the chaplain, Richard Johnson. He declared that he would never again be a member of such a brutal posse. Along with another incident where Dawes had purchased excess rations from the convict baker against the Governor’s directive, Phillip held him guilty of impropriety. The Admiral would have overlooked these two defiant misdemeanors and allowed Dawes to remain for another three years in the colony, as he had wished, provided that he admitted that he had been in error and pledge that no similar actions would happen again. Upon his refusal to do so, he was compelled to leave the new colony in December 1791 on the *Gorgon*, bound for England with the first group of marines.

## BECOMING GOVERNOR IN SIERRA LEONE

After a short stay back in England, Dawes set out to travel to Sierra Leone as Councillor to the “Governor of the company which Granville Sharpe, Wilberforce and his ‘abolitionist’ friends had formed in order to provide an African home for liberated negroes, and at the same time, to collect evidence that should strengthen the argument for the abolition of the Slave Trade.” He is said to have been Governor of Sierra Leone from December 1792 to March 1794, then reappointed on two more occasions



Figure 6: Historic map of Sierra Leone on the western coast of African.

From Sydney to Sierra Leone - The Travels of NSW First Fleet Surveyor William Dawes (12679)  
John Brock (Australia)

FIG Working Week 2024

Your World, Our World: Resilient Environment and Sustainable Resource Management for all  
Accra, Ghana, 19–24 May 2024

from January 1795 to March 1796 as well as early 1801 to February 1803. While he was in office he championed the cause of abolishing slavery, and after his terms as Governor, he carried on his work for social reform in what was virtually the first “free” state in Africa. From 25 January 1799 to 7 November 1800 he was in England being mathematics master at Christ’s Hospital school, making him available in June 1799 to give evidence before a committee of the House of Lords who were considering a bill to limit the slave trade. During his third term as SL Governor he was offered the position of the Governor of the Seychelles but he was unable to accept the appointment. From the summer time of 1804 to 1808 he lived in England firstly at South Lambeth then at Bledlow in Buckinghamshire where he rendered assistance to train the missionaries for the Church Missionary Society there. He was one of the Commissioners of Enquiry who oversaw the transition of power when Sierra Leone became a Crown colony in 1808. Upon completion of this task he made a return to England. Dawes first wife, a Miss Rutter, died around 1800 leaving him with a son, William Rutter and a daughter, Judith. Another son named Macaulay had died in infancy.

### **LAST DAYS IN ANTIGUA**

After his period in Sierra Leone he conceded to the special wish of Wilberforce that he move to Antigua in the West Indies in 1813, taking his daughter Judith with him, where he recognised the need for schools to educate the children of the slaves who had been forced to labour on the sugar cane plantations. His activities were carried out under the auspices of the Church Missionary Society.

While on Antigua he married one of his trainees, Grace Gilbert, in 1823, still actively carrying on his anti-slavery campaign until his death in 1836 on this Caribbean island. His son William Rutter Dawes (1799-1868), like his father, became both a Nonconformal clergyman and a leading British astronomer, establishing the Dawes Limit used by astronomers. Amongst his notable scientific discoveries are the “crepe rings” of Saturn and Jupiter’s Great Red Spot, having a craters on both Mars and the Moon named after him.

### **CONCLUSION**

When recounting the extraordinary life of an historical characters who was fervently committed to rid the world of the Slave Trade, it would be readily expected that there would not have been adequate time to make any more substantial contributions to the communities in which he resided, but there is no doubt that this very virtuous soul, William Dawes, made worthwhile and memorable undertakings wherever he went. Being virtually the only active land surveyor in the fledgling colony of New South Wales, due to the incapacity of his more senior Surveyor-General, Augustus Alt, he was indispensable to the new settlement in addition to making outward exploration in search of expansion.



---

From Sydney to Sierra Leone - The Travels of NSW First Fleet Surveyor William Dawes (12679)  
John Brock (Australia)

FIG Working Week 2024

Your World, Our World: Resilient Environment and Sustainable Resource Management for all  
Accra, Ghana, 19–24 May 2024



He also was called upon in his capacity as an engineer for any construction which was required for the management of the town. His invaluable studies in the indigenous culture and language combined with his meteorological and astronomical pursuits make his short tenure in the new southern land an incredible asset to the history and development of our country. However, his attempts to strive for humanitarian reform in Sierra Leone and Antigua put him in an upper echelon of world achievement which may be left most aptly described by one of his contemporary colleagues, Zachary Macaulay:

*“ He was one of the excellent of the earth  
who with great sweetness of disposition  
and self command possesses the merit of  
unbending principles.”*

## **BIBLIOGRAPHY**

- 1/ Currer-Jones, Annie, **William Dawes, R.M. -1762 to 1836**, (W.H. Smith & Son Ltd., Torquay 1930).
- 2/ De Griis, Richard and Jacob, Andrew, **William Dawes – Scientist, Governor, Abolitionist: Caught Between Science and Religion**, (Springer Cham, 1 December, 2023)
- 3/ Gillen, Mollie, **The Founders of Australia – A Biographical Dictionary of the First Fleet**, (Libraro of Australian History, Sydney. Published by Griffin Press Limited, Netley, South Australia, 1989).
- 4/ Mander-Jones, Phyllis, **William Dawes (1762-1836)**, (Australian Dictionary of Biography, National Centre of Biography, Australian National University) [adb.anu.edu.au/biography/dawes-william-1968](http://adb.anu.edu.au/biography/dawes-william-1968) (Accessed 7 February, 2024).
- 5/ Project Gutenberg Australia, - **William Dawes (c. 1758-1836)**, [gutenberg.net.au/pages/dawes.html](http://gutenberg.net.au/pages/dawes.html), (Accessed 7 February, 2024).
- 6/ Visit Sydney, - **William Dawes**, [visitsydneyaustralia.com.au/William-dawes.html](http://visitsydneyaustralia.com.au/William-dawes.html), (Accessed 7 February, 2024).

## **BIOGRAPHY**

Private land surveyor since 1973, **Bachelor of Surveying** (UNSW 1978), **MA** (Egyptology) from Macquarie Uni., Sydney (2000), **Registered Surveyor NSW** 1981. Now Director of Brock Surveys at Parramatta (near Sydney). Papers presented on six continents including Brunei, Nigeria, Morocco, Papua New Guinea, Hawaii, Bulgaria, Finland, Colombia and all states/territories of Australia as well as Norfolk Island. Stalwart of FIG International Institution for the History of Surveying & Measurement awarded **FIG Article of the Month March 2005, January 2012, June 2014, April 2017 and April 2023**. Institution of Surveyors NSW Awards – **Halloran Award 1996** for Contributions to Surveying History, **Fellow ISNSW 1999 & 2002 Professional Surveyor of the Year**. First international **Life Member** of the Surveyors Historical Society (USA), Rundle Foundation for Egyptian

---

From Sydney to Sierra Leone - The Travels of NSW First Fleet Surveyor William Dawes (12679)  
John Brock (Australia)

FIG Working Week 2024

Your World, Our World: Resilient Environment and Sustainable Resource Management for all  
Accra, Ghana, 19–24 May 2024



Archaeology, Parramatta & District Historical Society, Friends of Linnwood (House), **Foundation Member** Australian National Maritime Museum & Friends of National Museum of Australia. **Member** of Bradman Crest, International Map Collectors Society, Royal Australian Historical Society, National Trust of Australia, Hills District Historical Society, **Friends** of May's Hill Cemetery and St. John's Cemetery.

## CONTACTS

John Francis Brock  
P.O. Box 9159,  
HARRIS PARK NSW 2150, AUSTRALIA  
Tel: +61(0)414 910 898  
Email: [brocksurveys@bigpond.com](mailto:brocksurveys@bigpond.com)

---

From Sydney to Sierra Leone - The Travels of NSW First Fleet Surveyor William Dawes (12679)  
John Brock (Australia)

FIG Working Week 2024  
Your World, Our World: Resilient Environment and Sustainable Resource Management for all  
Accra, Ghana, 19–24 May 2024