## Budget cuts threaten scientific and cultural projects at London's Kew Gardens

Dennis Moore 11 June 2014

Kew Gardens in London is facing cuts totalling £1.5 million, despite warnings of the impact it will have on one of the world's leading botanic research institutions.

A cut of £1.5 million from the Department for Environment and Rural Affairs (Defra) has come on top of other financial pressures that have left a £5 million hole in Kew's budget. The shortfall will lead to the loss of possibly a sixth of the 750 workforce at the institution, with these job losses being mainly in areas of botanical research.

Defra oversees a network of 28 agencies and as part of the governments' cuts programme its budget has been slashed by £500 million since 2010, with a further £300 million in cuts to be pushed through by 2016. One of the agencies, the Environment Agency, which deals with many critical areas including flood prevention and protection, is to cut about 1,500 jobs by October.

The Royal Botanic Gardens at Kew have been one of the world's leading centres of plant research since its creation in 1759. Apart from the scientific value of the gardens, Kew draws in 2 million visitors a year to its spectacular plant collections and historic buildings, which last year saw a 29 percent rise in visitor numbers.

The famous Palm House, built between 1844 and 1848, was one of the first large-scale applications of wrought iron and is considered one of the most significant surviving Victorian iron and glass structures in Britain.

These cuts were approved against the advice of consultants at Defra who told ministers back in 2010 that Kew would lose its world-class status, with research declining below a critical level if the operating grant was not maintained beyond 2012.

Kew was set up as a non-departmental government body in 1983 receiving 90 percent of its funding via grant-in-aid from the government. Since that time, there has been a continuous cut in funding that has left it now receiving below 40 percent of its funding from grant-in-aid this year.

As successive governments have cut funding, Kew has had to rely on funding from its partner charity, The Kew Foundation and through the sales of tickets to enter the gardens, which cost £16 per adult. On top of this, it receives money from consultancy work and research grants but this will not fund the £5 million shortfall. These cuts have left Kew ever more dependent on philanthropic and commercially-generated funding.

The plant collection at Kew is considered the largest in the world. At their grounds based at Wakehurst Place in Sussex the Millennium Seed Bank, an international conservation project, has been set up to preserve plants throughout the world. The Millennium Seed Bank Partnership is the largest ex-situ plant conservation project in the world.

The seed bank aims to collect 25 percent of all the world's plants by 2020 (75,000 species).

The overall aim is to preserve plants that are threatened with extinction in their natural habitat. The wild relatives of common crops are genetically related to each other and the importance of these wild relatives is important in respect of food security because these wild crops contain greater genetic diversity and are more resilient in the face of pests, diseases and climate change. The project works with 80 partners in 80 different countries and to date the project has been able to successfully bank over 13 percent of the worlds wild plant species.

The Adapting Agriculture to Climate project at Kew has begun to collect seed from 29 common crop plant relatives whose genetic diversity can be used to breed useful traits into crops that are of commercial interest to better enable them to adapt to climate change, disease and pest resistance. The list of plants includes many of the staples for food including, rice, potato, rye, sunflower, wheat, oat and lentil.

In a 2010 report commissioned by Defra and written by Neil Chalmers, former director of the Natural History Museum, concerns were raised that Kew's scientific work was already suffering because of a lack of funds. This had led to key vacancies not being filled, and staff being diverted from key areas of research into fund raising.

David Attenborough one of the world's renowned naturalists and a BBC television presenter commented, "The important thing to remember is that it is the première botanical gardens in the world scientifically. In praise of Kew's Millennium Seed Bank he added "The seed bank is of world importance and it should be supported by the government like a proper institution or university and the continuing idea that Kew Gardens is merely a playground and that you just put up the prices to look after it is a misguided assessment of the value of Kew".

Colin Osborne, Reader in Plant Biology at Sheffield University, has explained the importance of the specific area of plant taxonomy, the science of the classification of animals and plants, an area of scientific research that Kew is renowned for globally.

He argues: "Kew is one of the last bastions of taxonomy, a branch of biology that has been driven to ground in universities because it doesn't yield immediate impact. It's a slow-burning science that underpins what everyone else does. We still don't know the names of vast numbers of species on Earth, and we never will if taxonomy dies. In the current climate, core funding for Kew and Natural History Museums is one of the few ways that will happen."

Mark Downs, chief executive of the Society of Biology, an organisation that works to develop education amongst scientists and promoting public interest in the life sciences raised concerns about the impact of these cuts to the Kew's world class contributions to heritage, conservation and education.

"Seed collections are valuable for conservation of biodiversity and are a potential source of plants with medicinal properties. The collection also includes wild relatives of crop plants. Many have favourable characteristics, such as drought tolerance, which can be introduced into commercial crops".

The significance of plants and their place in the future health needs of humanity are critical when considering the implications of cuts to research. Some 70 percent of the world's top-selling pharmaceuticals are derived directly or indirectly from plants, with 80 percent of the world dependent on plants for medicine, whilst at the same time 15,000 medicinal plants are threatened with extinction globally.

The scientists at Kew are working to conserve the vast diversity of plants and fungi that the future health and food needs of the planet are dependent on. It is a social crime that this work is in any way being jeopardised by cuts to funding.

Whilst critical scientific and cultural institutions such as Kew Gardens are threatened by the impact of cuts, the super-rich continue to accumulate obscene levels of personal wealth. A tiny fraction of this could quite adequately fund Kew Gardens and its vital projects for many generations to come.



To contact the WSWS and the Socialist Equality Party visit:

wsws.org/contact