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**WATER, SANITATION AND HYGIENE:
SUSTAINABLE DEVELOPMENT AND MULTISECTORAL APPROACHES**

**Sustainable financing for the water and
sanitation sector in Ethiopia**

Ghrmawit Haile & Will Davies, Ethiopia

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The following paper attempts to provide a case study of financing for the water sector in Ethiopia. The paper will, in particular, focus on the water and sanitation sector, since this sector has come to be financed from a very wide variety of sources and, in response, is now undertaking the challenging transition from a project to a programmatic approach. As such, it is hoped that the recent experience of the water and sanitation sector in Ethiopia can provide a number of important lessons for enhancing sustainable financing in donor-intensive environments.

Overview of the water sector in Ethiopia

Ethiopia is a country endowed with substantial, if variable, water resources. Finding ways to effectively finance the development of this enormous potential has naturally become a major development objective of the Government of Ethiopia, whose poverty reduction strategies place great emphasis on the opportunities provided by the country's water resource endowment. This includes huge opportunities for hydropower generation; for increased agricultural productivity through expanded irrigation; and reduced poverty, improved health and enhanced household and business productivity through improved access to clean water supply and sanitation facilities.

This later objective, namely the provision of safe and reliable water supply and sanitation facilities for the entire population, is the particular focus of this paper. Although an important goal for some time, a particularly strong commitment was made to improving water and sanitation in the "Plan for Accelerated and Sustainable Development to End Poverty" (PASDEP) which targets an increase in access to 84.5 percent of the population by the end of the PASDEP period in 2010. This five-year plan has since been further extended through the preparation of a 'Universal Access Program', which lays out a plan for near comprehensive water supply access by the year 2012. These national targets are significantly more ambitious than what would be required to meet the Millennium Development Goal for water supply access (70 percent by 2015).

This effort represents a commitment to implementing one of the fundamental principles of the Ethiopian Water Resources Management Policy (1999), which states that 'as far as conditions permit, every Ethiopian citizen shall have access to sufficient water of acceptable quality, to satisfy basic human needs'. So far, significant progress has been made in the right direction. For example, the UNICEF/WHO Joint Monitoring Program reports an increase in rural access to improved drinking water sources from 4 percent in 1990 to over 31 percent in 2006. The same survey shows urban access during the same period has increased from 74 percent in 1990 to 96 percent in 2006. Government data, which uses different definitions of access and of rural-versus-urban populations, shows a similar trajectory of growth in water supply access, with current provisional access figures of over 53 percent in rural areas and over 86 percent in urban areas for 2007/08.

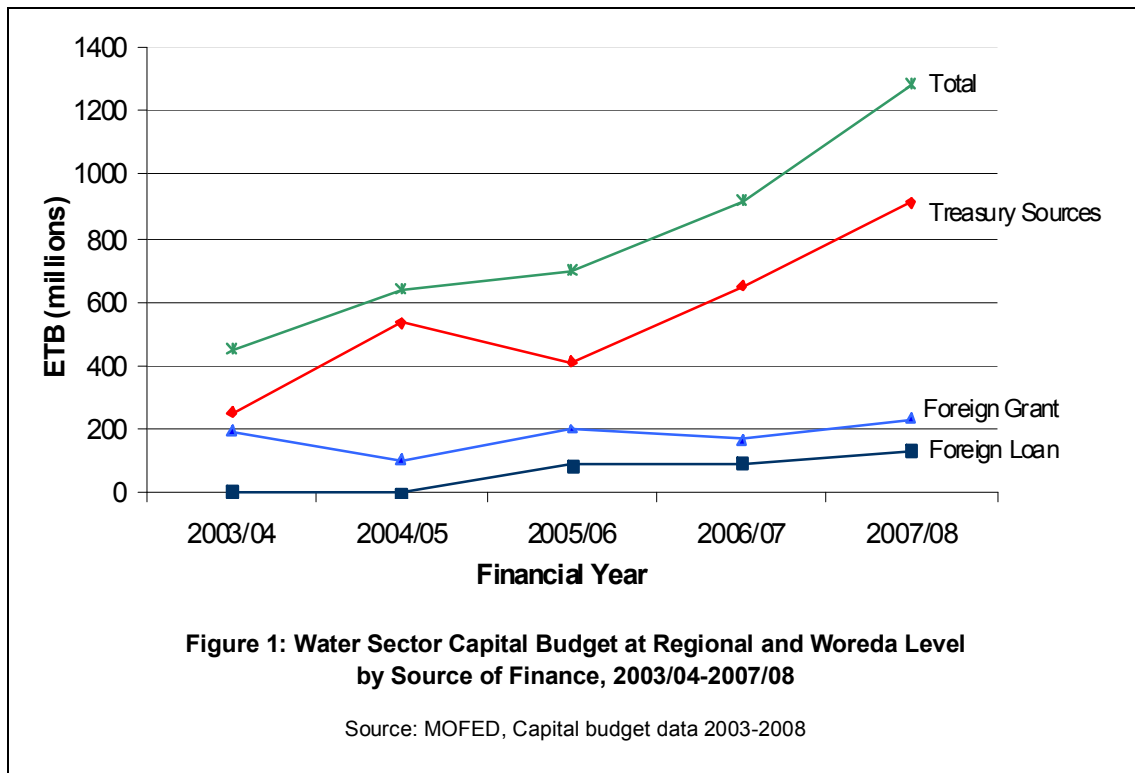
Nevertheless, while progress in the sector has been strong, accelerating the current pace of change in line with the national targets is requiring continued attention to developing sustainable financing strategies that mobilize and allocate resources in ways that expand and, at the same time, maintain the level of water supply infrastructure. As such, the paper will attempt to provide an outline of the current financial status of

the water and sanitation sector and the efforts being made to scale up financing in an effective and sustainable way, in particular through a shift towards a sector wide approach. The paper will also review the significant progress made towards developing the national policy and strategy framework for sustainable financing. Reflecting on these experiences, it is hoped, can provide a number of important lessons for other countries in their efforts to develop their own sector financing strategies.

Financing of the water and sanitation sector

The water supply and sanitation sector in Ethiopia is financed by a very wide range of organizations and institutional set-ups. The government provides the major source, which is largely channelled directly to regions and woredas (local government) via a Federal block grant¹. Under this decentralized system of government the financial administration level for any activity depends on the complexity of the investment required and the financial management and technical capacity at each level. The government also provides financing for water and sanitation through other channels: a notable example is the national Food Security program, implemented by regions on behalf of the federal government, which supports households in food insecure areas, and includes a sizeable amount of financing for local water management.

Over recent years, government funding for water has been increasing significantly. Figure 1 below demonstrates the current financing trend for capital investment in the water sector from treasury sources at the regional and woreda level, which is where the majority of expenditure on water supply and sanitation occurs. While the data presented is for the water sector as a whole, over 90 percent of ‘water’ capital expenditure at these levels is currently being utilized for water supply infrastructure, and therefore these figures can be seen as representative of water supply financing trends². The figure shows that the growth in capital budget from treasury sources has been very encouraging over recent years (over 400 percent growth in nominal terms over this 4-year period).



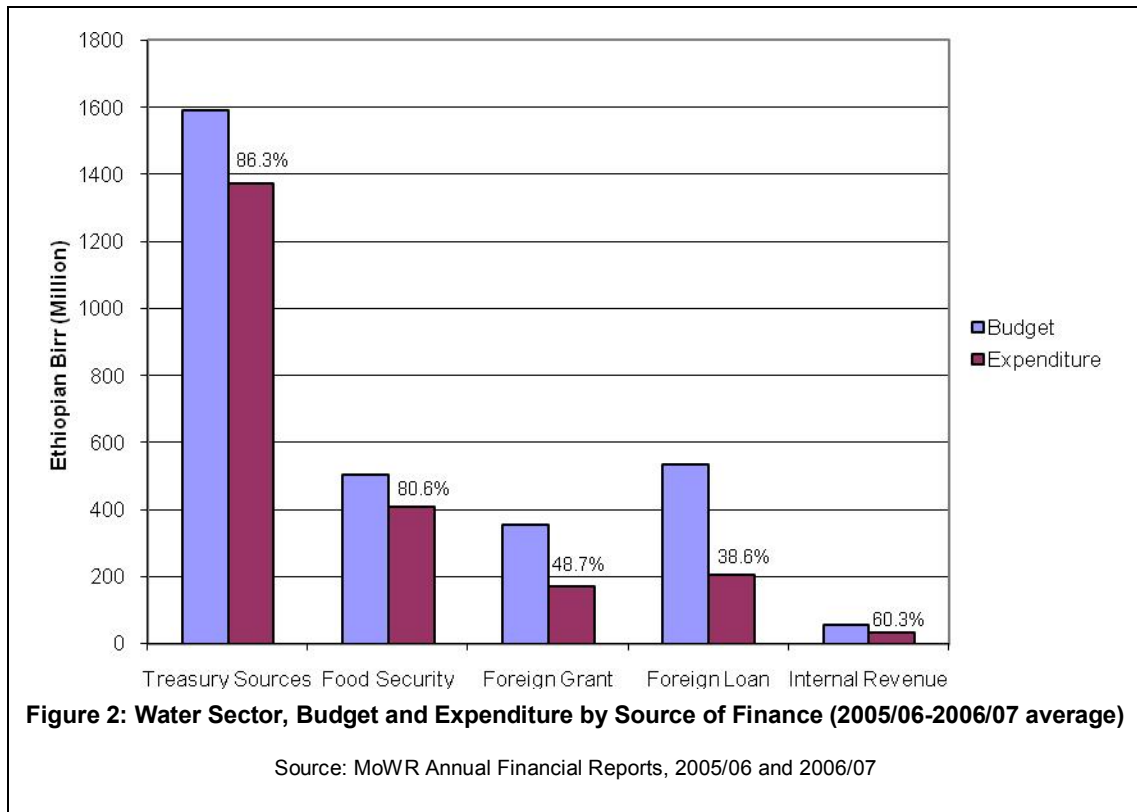
It should be noted that the budgets for foreign loans and grants are under-represented in this chart, as the national data from the Ministry of Finance and Economic Development (MOFED) is inclusive only of financial resources that are “on-budget” in the main financial reporting system for regions and woredas³.

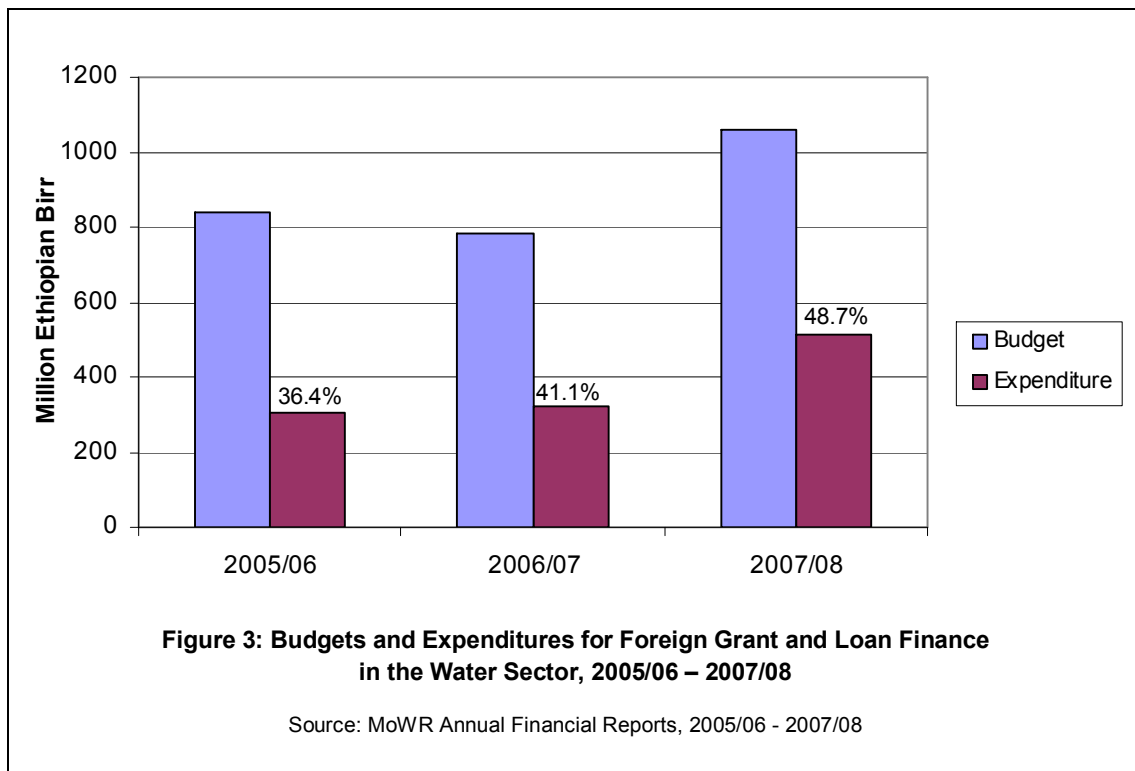
In reality, foreign grant and loan financing is significantly higher, although precise figures are difficult to estimate with accuracy due to the range of different financing mechanisms used by donors and NGOs. Nevertheless, estimates made by the Ministry of Water Resources (MoWR) show that in the 2005/06

financial year the total budget for foreign loan and grant financing was approximately 840 million Ethiopian Birr (ETB), equivalent to US\$ 84 million. It fell slightly the following year to 780 million ETB and then rose again to 1,060 million ETB in 2007/08. These figures are still likely to be underestimates, since some donor financing and most NGO financing remains entirely “off-budget”, and therefore cannot be included in the financial reports of the MoWR.

Although financial resources budgeted by donors are significant and of a similar scale to what is allocated by the government, utilization rates remain a major issue for the water sector in Ethiopia. Figure 2 presents the estimated budgets and expenditures for the water sector from a variety of sources, averaged across the two most recent years for which data is available (in contrast to Figure 1, this includes Federal level budgets and expenditures). Utilization challenges common to all financing channels include shortages of the necessary capital equipment and spare parts, as well as the limited availability of skilled artisans and technicians to implement the necessary construction activities. As such, the development of effective supply chains, and capacity building (including for the private sector and utilities), have both been highlighted as priority undertakings for the MoWR and other sector stakeholders.

However, while utilization of treasury funds has been in excess of 70 percent, there remain far greater concern regarding the utilization rates from other sources, especially for foreign grant and loan finance. The figure above clearly demonstrates the challenges associated with utilizing donor finance compared to government’s own resources, with an average of over ETB 400 million (US\$ 40 million) remaining unutilized from foreign sources over this two-year period. Frequently cited reasons for these low utilization rates, in addition to those mentioned above, include disbursement delays, lengthy reporting requirements, the time taken to obtain no-objection approvals for procurement operations and limited capacity to meet donor financing conditions. Nevertheless, as Figure 3 shows there have been gradual signs of improvement over recent years, for reasons that will be discussed in the following section.





A further challenge in utilizing donor finance relates to the different procedures required for each partner institution. For example, a study in April 2007 concluded that there is ‘an overwhelming call for greater consistency and standardization of [donor] disbursement, procurement, financial reporting, M&E and audit processes’⁴. Although much remains to be done to achieve this objective, significant progress has been made over recent years to move towards a programmatic, sector-wide approach. An overview of the progress made and remaining challenges in this regard is the subject of the section below.

Towards a sector wide approach

As mentioned earlier, the water and sanitation sector in Ethiopia is currently financed by a wide range of funding mechanisms. Rural water supply in particular is supported by almost every conceivable combination and permutation of development assistance, from national programs financed through government channels and using government implementation modalities, to localized interventions using innovative approaches and direct project financing mechanisms. Donor funding for urban water supply and sewerage is more standardized, being primarily stand-alone project lending (see next section for more details).

The fragmented nature of donor assistance and the associated high transaction costs of dealing with multiple donor institutions puts a severe strain on the limited capacity of the MoWR and other sector institutions. Recognizing these challenges, both the government and donors have been actively working over the past few years to change the way in which development finance in the sector is delivered. A significant example in this regard is the recent shift by the World Bank, African Development Bank and the UK Department for International Development (DfID) – the three largest sector donors – to harmonize around a single financing modality through the MoFED⁵. UNICEF and the Finland Cooperation Agency have also closely aligned their financial disbursement mechanisms with this modality. The next major step in this process will be for the largest donors to find a way to streamline their individual bureaucratic procedures for financial management and disbursement, procurement and reporting, which have proved to be major bottlenecks in the utilization of donor resources. Until donors can find a means to not only harmonize amongst themselves, but to find a way to align directly behind the government’s own procedures, these much needed resources will continue to be under utilized and donor programs will continue to drag long past their expected timeframes.

Another promising venture in Ethiopia in terms of harmonization and alignment of financing has been the development of a multi-donor program for the Protection of Basic Services (PBS). The PBS program has been in operation since 2006, and is providing significant donor financing for the basic service sectors, including water and sanitation. The finance under this program is fully pooled with treasury resources in a budget-support manner and is channelled to regions and woreda's as part of the government's block grant.

Thus far, PBS resources have been used - along with treasury resources - primarily to cover recurrent costs, in particular in the health and education sectors. However, recently the PBS program has begun a pilot of a Local Investment Grant (LIG), which will be used to finance capital investment in basic services (including water and sanitation). The LIG has been designed as a performance-based grant to woreda's that have demonstrated sufficient capacity and accountable planning for capital investments. Under the LIG, the flow of funds follows existing arrangements for the federal block grant, uses existing rules for disbursement, and is fully synchronized with the Ethiopian fiscal year. As such, the financing mechanism developed under the LIG is much closer to a fully aligned sector budget support program than the current sector financing we see in the sector. The LIG has only just begun the pilot stage and therefore it may be some years before the concept could be applied as the primary financing modality for the water and sanitation sector. In the meantime, the focus of donors and government will remain on the effective utilization of existing resources and, equally importantly, the development of the building blocks (e.g. M&E, sector planning, etc) that will be pre-requisites for a full sector wide approach in the coming years.

Policy framework for sustainable financing

In addition to this harmonization and alignment effort, the government is also actively developing its policy and strategy framework upon which to build a sustainable system of financing of water and sanitation. In the past, only a nominal amount has been levied for the supply of clean water, but in 1999 the Ethiopian Water Resources Management Policy introduced the principle of full cost recovery for urban water supply, and recovery of a minimum of operation and maintenance (O&M) costs for rural water supply. Before that introduction, cost recovery was extremely low, barely covering O&M costs in urban areas and generating little resources for rehabilitation or expansion of services.

Cost recovery was less of an issue during times when low levels of infrastructure resulted in limited O&M costs. With infrastructure now expanding rapidly the importance of the issue has become increasingly clear. Based on UAP forecasts, around 16.3 billion Ethiopian Birr (US\$ 1.6 billion) is required in accumulated investment to achieve the national water and sanitation targets. Without effective cost recovery the current rate of expansion will be impossible to maintain.

Nevertheless, it is also important for any financing strategy to adopt a progressive approach, and in many cases it is necessary to balance economic efficiency and affordability for a transitional period until full cost recovery can be achieved. This is emphasized in the Ethiopian Water Sector Strategy (2001), which is premised on principles that balance cost recovery with efficiency and affordability considerations.

Following the development of this strategy, a further key milestone for sustainable financing of water and sanitation was the creation of the Water Resources Development Fund (WRDF) in 2002, established to implement full cost recovery principles in the urban water sector. A primary objective of the WRDF is to provide loans to water supply and sanitation utilities that are able to achieve financial sustainability. The WRDF is funded by both government and donor projects and currently is facilitating the channeling of resources to various water utilities that are expected to repay loans⁶. In order to help ensure loans can be repaid, the WRDF requires both "Willingness-To-Pay" surveys and affordability surveys when towns first approach them for finance.

Since the establishment of the WRDF, approaches to tariff design and setting has become more rigorous. The WRDF expect a tariff review when considering making a loan, and increasing block tariffs designed to meet investment and O&M costs are the norm. However, full cost recovery remains a challenge and the government is still working to increase tariffs and collection rates in line with the national policy directive.

Therefore, while much has been done to strengthen the policy and institutional framework, there remains a need to further develop and refine the national cost recovery and tariff policies in order to put in place a comprehensive framework for achieving financial sustainability. Such a strategy will need to take into account the wide variations in water accessibility and population density in Ethiopia, and the implications this has for investment cost requirements in different parts of the country. As mentioned above, it would also need to be based upon principles of equity, affordability and willingness to pay, as well as efficiency

consideration⁷. In particular, the issue of how to transition between what can be paid and what ultimately needs to be paid requires further attention.

Of course, sustainability is not only a question of cost recovery but also, more fundamentally, an issue of technology choice. As such, significant efforts are currently being made to increase the sustainability of water and sanitation financing through appropriate technology choices. Most recently, a task force was established by the MoWR to review the strategies and plans for the rural component of the accelerated implementation of the UAP. In addition to calling for scaled up financing and streamlined disbursement procedures (as discussed above), a major conclusion of the review was to further prioritize low-cost technologies wherever feasible. These revised strategies have not been formally adopted as the review is currently still being conducted. However, this strategy represents the likely direction to be taken and highlights another area in which the government is attempting to address the challenge of sustainable financing for water and sanitation in a low-income environment.

Conclusion

Ethiopia's challenging hydrological patterns and historically low investment in water and sanitation interventions create an overwhelming case for scaling up investment in the sector to reduce poverty, improve health and contribute to general socio-economic development. In response, budgets for the water and sanitation sector have been increasing promisingly over recent years from government, donor and NGO sources. Expenditures have also been growing, although at a slower pace, largely due to the current low utilization rates for donor-financed sector investment projects.

Growth in budgets and expenditures has also been reflected in improved outcomes, with both water supply and sanitation access figures improving steadily over recent years. However, improving water supply access is a capital-intensive activity, and limited treasury resources are mostly still being absorbed through recurrent costs. Donor and NGO finance is providing much needed support, but more work remains to be done to move towards the sector-wide goal. How this transpires will depend on many factors, not least the institutional flexibility on the part of donors to fully align with government systems.

Policies and strategies for financial sustainability have also been developing fast. While the principles are now well agreed, further work is required to structure these principles into a form that can be implemented equitably across all users. In particular, adopting a structured and transitional approach to the difficult trade-off between efficiency and affordability is an important area for further attention.

Finally, it should be always emphasized that expanding and upgrading physical infrastructure will always require corresponding investments in human and institutional capacity, without which financial sustainability will always remain a theoretical ambition. Therefore, in our efforts to rapidly achieve physical progress, it is important not to overlook the need to achieve similar progress in strengthening the human capital base upon which such development rests.

Notes

1. The block grant is a constitutionally mandated entitlement for each Regional Government and is determined by a legislated formula that is largely based on equity considerations (population, income, level of development).
2. This is not the case when we include Federal level data, where substantial resources are being utilized for water resources infrastructure, in particular medium and large scale irrigation.
3. For example, donor finance channelled directly to sector institutions can be accounted in the Federal level budget, while expenditures are in fact being made at lower levels of government. This was one of a number of reasons for the major donors to shift recently to "Channel 1" financing, i.e. directly through the MOFED.
4. *Diagnostic assessment of existing financing mechanisms to inform the operationalization of the Joint Financing Agreement*, Delta Partnership, April 2007.
5. The World Bank and DfID have gone further and merged their financing under a single 'Multi-Donor Trust Fund', and it is hoped that this fund will provide a mechanism for other donors to directly harmonize their financing.
6. Grant financing is often required to build the capacity of the town utilities to the point where they are eligible to receive loan finance for system development and expansion.
7. See Francesca Fulgoni, "Preliminary Assessment of Economic Sustainability of Water Supply Schemes in Rural Highlands of Oromiya Region – Ethiopia" December 2008, for a detailed assessment of the current economic sustainability of rural water supply in Ethiopia

References

- Delta Partnership (2007), Diagnostic assessment of existing financing mechanisms to inform the operationalization of the Joint Financing Agreement, April.
- Francesca Fulgoni (2008), Preliminary Assessment of Economic Sustainability of Water Supply Schemes in Rural Highlands of Oromiya Region – Ethiopia”, December.
- MoWR (2006), Financing Strategy for the Water Supply and Sanitation Sector, November.
- MoWR (2008), Reformulation of Strategies and Plans for an Accelerated Implementation of the UAP for Rural Water Supply (MoWR Draft – Sept).
- MoWR (2008), Joint Budget Aid Review: Review of Financial and Performance Data for the Water and Sanitation Sector, June 2008. Addis Ababa.
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Contact details

Ghrmawit Haile
Tel: +251 116 610 887
Email: ghrma_h@yahoo.com

Will Davies
Tel: +251 913 202 163
Email: willdavies80@gmail.com
