

FRESH IDEAS FOR SOCIAL CHANGE

Teifi Demonstrator Hackathon 28-29.02.2024

ewmpas

Start Something Good

EXECUTIVE SUMMARY



The Hackathon Challenge

“How might we better collaborate to improve water quality in the Teifi, whilst encouraging climate resilience and enhanced biodiversity?”

Summary of responses from working groups at the Hackathon

- 1. Farmer Led Projects – A farmer led participatory budgeting model, engaging local communities.**

The proposed projects would need to be built on trust and clear principles for working, co-designing, and co-producing each project in line with the needs, resources, and aspirations of each community.

- 2. Data Integration – A data “Netflix”.**

A single trusted organisation holding all the data for all stakeholders that are

currently collecting data. This data will then be available to the eco-system through different “channels” according to the needs of stakeholders.

3. Water Quality Awareness – A campaign and Theory of Change.

Fostering individual awareness in the catchment through to crucial groups like the Teifi Partnership. The goal is to build a shared understanding of the state of the river and to precipitate a range of actions through all the different actors involved.

4. Long-Term Funding – A “ground up” funding stream.

The creation of a grassroots body to collate and quantify the different mitigation options within the catchment, understanding all finance options, and prioritising actions in the catchment to deliver outcomes.

This would assist in identifying funding gaps, cost-effective methods, and provide a basis for pitches for large and small-scale investment.

5. Rainfall Management – An educational approach, leading to behaviour change.

A rainwater management education approach would alleviate responsibility on one group, community, or sector. This approach would invest in educating different sectors and communities, and link educational institutions with farmers to learn about rainfall management practices.

6. Behavioural Change – A case study on land managers.

The development of a case study of land managers to provide a baseline of knowledge and benchmarking, helping farmers to prioritise their journeys and better communicate what they are doing. This behaviour change approach would need to deliver multiple public goods, with livestock management and carbon capture working hand in hand.

The Hackathon Challenge

Cwmpas was commissioned to deliver a hackathon event that would bring together multiple stakeholders from the Teifi Catchment to address the following problem:

“How might we better collaborate to improve water quality in the Teifi, whilst encouraging climate resilience and enhanced biodiversity?”

Specifically exploring solutions that:

- **Adopt innovative and agile approaches**
- **Improve evidence communication**
- **Support a range of remedial interventions**
- **Capture learning and manage it so it can be scaled up to bring multiple benefits to other catchments**

The Process

The two-day event was held on 28-29th February, in Aberystwyth. Forty attendees comprising of academics, regulators, farmers, public bodies, and scientists, embarked on two days of intense and progressive workshops that aimed to share perspectives, create new connections, learn new methodologies, arrive at innovative ideas, and be encouraged to work in co-operation. Creating multiple diverse groups is key to the process. Participants were split into six teams, each comprising of 6-8 members from a range of diverse backgrounds and perspectives.

Workshops

As well as hearing expert sessions on catchment data, and comparable and relevant UK wide projects, the six teams were taken through seven different workshops throughout the event. These included:

Asset Mapping

Problem Convergence

Idea Convergence

Pitching

Problem Divergence

Idea Divergence

Prototyping

Further details on these workshops will be included in the full report.

Ideas Generated

Below are the six ideas generated from the two-day hackathon and responses from the wider stakeholders to each pitch.

Group 1

Challenge: Farmer Led Projects

Idea: "Farmer Led Participatory Budgeting Model"



The key to this idea is to give some level of trust to local communities to decide how they want to spend their money. A percentage of the overall budget would be assigned to farmer led projects, identifying, and mapping suitable areas that have similar monitoring metrics.

This would also need to consider social capital and local co-operation built on mutual trust. Following this, localised planning would need to happen in each one of these areas, bringing together these place-based networks alongside wider stakeholders including Dwr Cymru and NRW. Essential to this working relationship

would be transparency, trust, mutual sharing of knowledge and data, and a collective approach to problem solving.

The proposed projects would need to be built on these clear principles for working, co-designing, and co-producing each project in line with the needs, resources, and aspirations of each community. This will help to ensure that the voices in each community are heard and that there is agreement around plans and local solutions.

Support required

This idea would require adequate funding, legislation, and the involvement of farmers.

Engagement and trust are critical; farmers know their own farms and know where the problems are.

Feedback, questions and/or comments from the floor

How do you decide what stakeholders are involved in the participatory budget?

Farmers may be wary of nutrient trading. Is this similar to carbon trading?

Group 2

Challenge: Data Integration

Idea: "Data Netflix"



The idea is that a single organisation will hold all the data for all stakeholders that are currently collecting data. This will allow all stakeholders to data share, with one agreed trusted body assimilating and organising all the data.

This body will put the insights together, analyse it, and then invest in new monitoring and new models. This will help the eco-system to get more insights from all the data that currently exists.

The next step is a data platform which everybody can access, but one that can be looked at through "different channels" (e.g. a "Discovery Channel," on a personal channel basis, for example a "water catchment area"). The platform would be a data "Netflix." From inception this needs to be an integrated process, with an evolving and growing platform. This is a long-term solution.

Support required

The recognition of the importance of the first few steps.

Finding a common approach and an agreement between the stakeholders.

Encouraging all stakeholders to come together and discuss what they are all willing to share and enter onto the platform.

Behaviour change. Recognition that the stakeholders are trying to find reasons to do something progressive, rather than do nothing at all.

Funding. Exploration as to how resources are pooled and where that money gets spent, distributed correctly, and aligned with our goals.

Feedback, questions and/or comments from the floor

There is a barrier in the willingness to share raw data. A potential solution, and one that has been used in Northern Ireland is the creation of a firewall, or an ethical wall, establishing a "halfway house"; enough information is provided to help regulators conduct data capture while sufficient privacy measures are implemented to ensure that farmers are not prosecuted, for example, because they may have a field that was very high in phosphate.

Establishing what this "one trusted body" is going to be is a significant challenge.

A concern was raised that it may prove onerous for farmers to input a lot of different information, but there are examples of where information about livestock movements and nutrients can be pre-populated.

The insights needed might be varied. Generating additional applications will be necessary overtime and can be built upon in a staged approach.

It was noted that Welsh Government has a "data gateway project" underway to pull data from multiple platforms into a single place for analysis at a catchment level.

Group 3

Challenge: Water Quality Awareness

Idea: Water Quality Awareness Campaign and Theory Of Change



This proposal acknowledges that the information about the state of the catchment is multi-faceted; some data is uncertain, some of it is information around things like plastics and fish, which is also contested. The overarching goal is to foster individual awareness in the catchment of the Teifi, right the way through to groups like the Teifi Partnership.

The Partnership is critical because it builds a shared understanding of the state of the river in a way that is shared and not contested. As a consequence of that, one can precipitate a range of actions through all of the different actors involved, from individuals, farmers, water companies, and regulators etc., to change the nature and the state of the river in a positive direction. This would develop a citizen science approach, pulling all this together and trying to influence through these means.

Support required

There was recognition that there are lots of issues with the granularity behind this and therefore the process requires staged implementation. Such granular steps may include a media campaign, social media use, social media influencers, a data portal etc.

A lack of trust was also identified as a barrier, between the public and perhaps the regulator, or the water company, or the farming unions. A lack of trust certainly exists at the moment.

We need to harness the power of partnership and collaboration. We need to use this partnership to deliver a single message to engage the wider network. Therefore, an additional barrier/question is "How do we get to that joint messaging and how do we agree those approaches?"

A third barrier/question is "How to make such a very complex issue simple to understand?"

Feedback, questions and/or comments from the floor

How do we build trust?

Presenting the information honestly, with transparency, is fundamental to citizen science and that is not currently encouraged. If we can tell the 'story' backed up by data, then that is a powerful message.

Because the data is often contested, the fact that a partnership involves bringing people together who do have different views is a way of coming to a common understood position. Talking to your adversaries helps you to see other perspectives and positions.

What a lot of people are looking for is that something is being done rather than something is being constantly talked about. Actions speak louder than words.

We need to raise awareness about what we are doing about the water quality, and what individuals can do themselves.

Group 4

Challenge: Collaborative Long-Term Funding

Idea: Create a "Ground up" funding stream for the catchment



The creation of a grassroots body to essentially "do the math" for the catchment. This would involve collating and quantifying all the different mitigation options within the catchment, understanding what finance *is* attached, what finance *could* be attached, and using that to compile a prioritised list of actions in the catchment to deliver the outcome.

This would assist in identifying funding gaps, and the most cost-effective method, and could then be used as the basis for pitches to large and small-scale investment.

There is also the potential for reallocation of funding within catchments in an innovative manner e.g. through mechanisms that may look like nutrient trading, but just to emphasise, this is "grassroots up." What is on the table comes from an understanding of what can be delivered within the catchment. Through this mechanism we could obtain greater clarity on what is doable, and at what budget, in a manner that is deliverable by stakeholders.

Support required

Data and evidence. We need to engage with our land managers to support on the evidence (this could be a collaborative approach with Group1).

The current funding is sat in multiple pots (possibly up to sixteen different Welsh Government funding schemes). Furthermore, they are at Wales level that results in a huge amount of time loss, resources, and the time required to complete multiple funding applications. To overcome this we require a single pot of funding for the Teifi exemplar; an area-based pot that requires all stakeholders and interrogation of the existing funding structure.

We need to engage further support and conduct risk assessments on existing funding models while exploring new.

Stakeholder fatigue. Seed funding is required to assemble a dedicated stakeholder team so we can get further analysis.

Feedback, questions and/or comments from the floor

The biggest problem is the time that is invested in going through processes and boundaries. If you put the money in a pot to specifically invest in this work, you overcome all the "jumping hoops," which as we know, delays the delivery of action.

There is a need for a trusted body to take this forward. We possibly do not have the right structure in place right now. It would be highly innovative to do that.

A similar idea to this came up recently. Some innovative working groups at the United States around this principle of "Warm Water," where the water provider, the supplier, the wastewater treatment works providers, and the catchment authority came together to do something similar. It is not an NGO, but it is an organisation with a common goal. It is believed that they have had some big successes in the way that they have separated out their investments.

A cascade project. It is important to have a system-based solution. It needs to be sophisticated; it is not just about water, it is also carbon, air quality, and efficiency of nutrients.

We need to move away from tailoring our project to a particular funding source and instead turn this on its head, identify the project and *then* source the funding to support it.

Group 5

Challenge: Rainfall Management

Idea: A Rainwater Management Education Approach that Leads to Behavioural Change



A rainwater management education approach would alleviate responsibility on one sector, one community, or one group. We need to widen the engagement beyond farmers, householders, and the Local Authority.

We need to invest in educating different sectors and communities to ensure that they understand, for example, "slow to flow." As a further example, school children could visit farms to understand water management methods and apply them within a school setting in order that they too can aim to manage rainwater.

We are also aiming to create a network in this community of credibility while evidencing that the small things that individuals can do make a difference, thus encouraging them to continue. We can then spread the message, not just as a farmer, not just as a school child, but as a future leader.

We have the power that to take the learning and all the evidence into actions outside our day-to-day life. We need to demonstrate how the things we do at home together

contribute to a much larger solution. We think that would be a very powerful way of changing behaviours permanently.

Support required

We have some gaps in understanding that we need to identify and ascertain where they will have the most value. We have farm level information, but this needs to be matched from an urban perspective as well; we need to do more to understand the surface water volumes that are contributing.

We require long term funding models. We need to look at opportunities such as supply chain funding, payment frequency, system services, and public goods. We need to explore the possibility of diverting Welsh Government flood risk funds into these and having that long term vision to enable behaviour change.

We need to be able to prove the benefits of the idea, provide proof of concept, and the cost savings that can be applied to Local Authorities and Government.

We need to conduct more engagement in urban settings while also promoting the financial benefits that come from soil water retention on farms, better soil structure, better crop management etc.

Trust and integrity are also barriers. To achieve this we require long term funding. We need to avoid "funding fatigue" via multiple short-term projects. One cannot manage a farm going forward and make changes based on one-year funding programmes.

We need to prove that something is going to work.

Feedback, questions and/or comments from the floor

There is a wealth of other linkages from this activity that have the potential to create further engagement and awareness such as the misinformation and misunderstanding around sewer overflows, and how they operate.

This is a very simple solution of making the different things we do very visible to everyone who can do their bit. Sometimes we tend to think we need a profound massive change. Sometimes there is space for a legislative intervention, but sometimes, the most important thing is to keep doing the things that we are doing; being motivated and/or motivating each other to continue because something is working.

Highways drainage is also very important. Future leaders and future voters as well.

Group 6

Challenge: Behavioural Change

Idea: Case Study - Land Managers (Knowledge, People, and Money)



The development of a case study of land managers as one group of key stakeholders for the project. This case study will provide a baseline of knowledge and benchmarking. We propose following a typical farmer's journey and how a better knowledge base can work with the aspirations of farmers in their communities for healthy lives and businesses. This will help farmers to prioritise their journeys and better communicate what they are doing.

This behaviour change approach would need to deliver multiple public goods, with livestock management and carbon capture working hand in hand, looking at approaches developed in Northern Ireland around planting chicory for grazing. Dialogue would need to be started around scarcity of funding and maximising what can be done and what cannot be done.

Support required

Acquiring resources to conduct the initial baseline.

Long-term and repeated engagement.

How to demonstrate success when we know that these processes take a long time.

The availability of policymakers and other influential stakeholders - will they be able to visit frequently enough to experience the change?

We require multiple examples to identify what 'good' looks like.

Feedback, questions and/or comments from the floor

In terms of behavioural change, there has been a theme around articulation of benefits, and who we engage with that information.

It can become confusing when trying to measure everything (getting caught into discussions of stacking benefits, carbon sequestration, biodiversity enhancement etc).


How do we engage with stakeholders to highlight the positive stories?

Stories need to tell the human and anecdotal journey, aligned with the data journey.

We have quite big glaring gaps in our knowledge. We monitor to deliver regulation, but we do not monitor to deliver behavioural change.


The level of monitoring needed to deliver behavioural change is a quantum greater than is needed for regulation.

If we are serious about this catchment and many other catchments across Wales, we need to 'dive deeper' into the behaviour change and see what the nuances are in each of those catchments while maintaining the importance of evidence, the role of academia, and science.



"A good idea is a clever solution to a problem, one that I have never seen before. But if an idea is not taken up and used as a solution to a problem it has no value. It becomes a non-idea. Lying in a drawer it is useless. Worse than useless, it's a complete waste of space. Ideas have to be applied before they are recognized as good ideas. "

Paul Arden



“When people feel like they belong, they are able to be their best and do their best”

Susie Wise, d:school

