



Submit by 13 January 2006

**DARWIN INITIATIVE APPLICATION FOR GRANT ROUND 14 COMPETITION:STAGE 2**

Please read the Guidance Notes before completing this form. Applications will be considered on the basis of information submitted on this form and you should give a full answer to each question. Please do not cross-refer to information in separate documents except where invited on this form. The space provided indicates the level of detail required. Please do not reduce the font size below 11pt or alter the paragraph spacing. Keep within word limits.

**1. Name and address of organisation**

<b>Name:</b> CAZS Natural Resources	<b>Address:</b> Thoday Building, Deiniol Road, University of Wales Bangor, Bangor, LL57 2UW, Gwynedd, Wales, UK.
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**2. Project title (not exceeding 10 words)**

CONSERVATION OF BIODIVERSITY IN TRADITIONAL WEST AFRICAN VEGETABLE SPECIES
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**3. Project dates, duration and total Darwin Initiative Grant requested**

<b>Proposed start date:</b> May 2006	<b>Duration of project:</b> 36 months	<b>End date:</b> April 2009			
<b>Darwin funding requested</b>	<b>Total</b>	<b>2006/07</b>	<b>2007/08</b>	<b>2008/09</b>	<b>2009/2010</b>
	£ 245,454	£ 72,944	£ 74,939	£ 94,627	£ 2,944

**4. Define the purpose of the project in line with the logical framework**

This Darwin Initiative submission proposes to address the urgent need for research & awareness-raising on the conservation of indigenous vegetable biodiversity in two of the poorest countries in West Africa – Mali & Benin. There has been little formal study of these species & their potential, & there is a pressing need for survey & inventory, propagation, production & marketing of these species, & awareness-raising at the grass roots & among decision-makers in the region.

This Darwin Initiative project proposes to help remedy this situation by carrying out research (survey & inventory) of the vegetable crops & their traditional knowledge in Mali & Benin, analysis of their quantitative & qualitative potential for horticulture, & awareness-raising of their value & significance among stakeholders in the region. This would contribute to capacity-building, nutritional health & food security, reduction of reliance on exotics & more sustainable agricultural production practices. It would also greatly assist Mali & Benin to meet their commitments to the CBD (Articles 7,9 and 10).

**5. Principals in project. Please provide a one page CV for each of these named individuals**

Details	Project Leader	Main project partner or co-ordinator in host country	Main project partner or co-ordinator in host country
<b>Surname</b>	Pasquini	Gamby	Assogba-Komlan
<b>Forename (s)</b>	Margaret	Kadiatou	Françoise
<b>Post held</b>	Research Officer	Project Leader	Project Leader
<b>Institution</b>	University of Wales Bangor	Institut d'Economie Rurale, Mali (IER)	Institut National des Recherches Agricoles du Benin (INRAB)
<b>Department</b>	CAZS Natural Resources	Programme Fruits et Legumés	Plantes Perennes: Programme Diversification
<b>Telephone</b>			
<b>Fax</b>			
<b>Email</b>			

**6. Has your organisation received funding under the Darwin Initiative before? If so, give details**

The University of Wales Bangor has received project funding. For recent examples please see projects with reference codes: 162/10/031; 162/12/020. CAZS Natural Resources has only received Darwin Initiative pre-project funding.

**7. IF YOU ANSWERED NO TO QUESTION 6 describe briefly the aims, activities and achievements of your organisation. (Large institutions please note that this should describe your unit or department)**

**Aims (50 words)**

**Activities (50 words)**

**Achievements (50 words)**

**8. Please list the UK (where there are partners in addition to the applicant organisation) and host country partners that will be involved in their project and explain their roles and responsibilities in the project. Describe the extent of their involvement at all stages, including project development. What steps have been taken to ensure the benefits of the project will continue despite any staff changes in these organisations? Please provide written evidence of partnerships.**

1) Institut d'Economie Rurale (IER), Mali ; 2) Institut Nationale de Recherche Agronomique du Benin (INRAB) & 3) University of Abomey-Calavi, Benin.

IER & INRAB are the host country project leaders (the University staff will support INRAB with their expertise). The host country partners will take the lead role on the survey & inventory of IVs, the collection of seed samples for the establishment of a seed bank & the establishment & running of domestication trials. In collaboration with the UK partners they will work on the development of the survey questionnaires, train enumerators, develop pamphlets & radio programmes, write the peer-reviewed publications, & run the awareness-raising workshops. These responsibilities were agreed during the one week pre-project visits by the UK partners to Mali & Benin. After consultation with other stakeholders, the discussions led to the joint identification of the project objectives, the activities needed to achieve these, the required human & financial resources, the sharing of responsibilities, the expected outputs & the strategy to ensure lasting legacy. The engagement by IER & INRAB partners at the pre-project stage, their comprehensive input at the proposal development stage & their intention to be significantly involved in the running of every activity demonstrates their strong sense of ownership of the project. Four, four and three scientists from IER, INRAB and the University will be participating in the project, respectively, each devoting between 10 & 20% of their time to the project. This will ensure that even if the organisations undergo staff changes, the remaining staff will be in a position to carry forward the project. Letters of intention from the heads of IER & INRAB are included with this application.

**9. What other consultation or co-operation will take place or has taken place already with other stakeholders such as local communities? Please include details of any contact with the government not already provided.**

During the preproject August visit to Benin the INRAB & UK partners consulted four stakeholders with an interest in IVs: from the University of Abomey-Calavi Mr Romaric Vihotogbe (Agronomic Science) & Dr Dansi (Head of Plant Genetic Resources Unit, Science & Technology); Dr S.R.Vodouhe (Regional co-ordinator for west & central Africa, IPGRI) & Mr Philip Idinoba (Researcher, WARDA). In Benin the key decision-makers in agriculture are the Ministère de l'Agriculture de l'Elevage et de la Pêche and the Ministère de l'Environnement, de l'Habitat et de l'Urbanisme. The INRAB partners are in close contact with the Conseiller Technique à la Recherche et aux Organisations Paysannes in the former Ministry, and with the Directeur de l'Environnement in the latter. Both will participate in the project workshops. During the earlier visit to Mali it was possible to consult Dr Alamir Touré from the Ministère de l'Équipement de l'Aménagement du Territoire de l'Environnement et de l'Urbanisme, who requested to be kept informed about progress of the project.

The two countries share similar stakeholder associations who would have an interest in the project, who therefore will be sought out for consultation & cooperation. These include the Organisation de Producteurs (producers associations organised as a Federation at local, regional & national levels – both IER and INRAB actively collaborate with these organisations in agricultural technology development and field trials); Protection Maternelle (mixed NGO/government run groups); Groupement Feminin (women's cooperative groups in each village); Centre de Sante' Communautaire (cheap hospitals for resource-poor people); Association Villageoise (originally formed as part of a World Bank scheme). Additionally, in Benin the Laboratoire de Technologie Alimentaire (INRAB) & the Direction de l'Alimentation et de la Nutrition Appliquée (DANA), & in Mali the Faculté de Science et Technologie (Université du Mali) will be consulted.

**PROJECT DETAILS**

**10. Is this a new initiative or a development of existing work (funded through any source)? Are you aware of any other individuals/organisations carrying out similar work, or of any completed or existing Darwin Initiative projects relevant to your work? If so, please give details explaining similarities and differences and showing how results of your work will be additional to any similar work and what attempts have/will be made to co-operate with and learn lessons from such work for mutual benefits.**

In Mali this project represents a completely new initiative. IER have not been involved in any work to survey & inventory, produce & conserve IVs, & to their knowledge no other organisation has carried out this or similar work in the country.

Benin has had a \$ grant from IPGRI to identify risky cultural practices (fertiliser & pesticide use) on the most cultivated & consumed leafy (but not exclusively indigenous) vegetables in the South of the country. This Darwin project, therefore, will be a new initiative through its comprehensive country-wide IV seed collection, its survey on the cultivation &/or collection practices, & the uses & preparation techniques (of not only the leaves, but also roots, stems, flowers, seeds & fruit)

This Darwin project could benefit from exchanging knowledge with the Darwin Initiative Round 13 GardenAfrica's project 'Africulture centre' on medicinal plants in South Africa (as certain IVs may have medicinal uses too) and will bring novel & unique insights from Mali & Benin to the CAZS Natural Resources coordinated EU FP6-funded Coordination Action *IndigenoVeg*. This latter activity is not a research project, but a network of sub-Saharan African partners with an interest in IVs & urban agriculture, who aim to share on-going research experiences to promote the production & marketing of IVs in urban areas, and starts in January 2006.

**11. How will the project assist the host country in its implementation of the Convention on Biological Diversity? Please make reference to the relevant article(s) of the CBD thematic programmes and/or cross-cutting themes (see Annex C for list and worked example) and rank the relevance of the project to these by indicating percentages. Is any liaison proposed with the CBD national focal point in the host country? Further information about the CBD can be found on the Darwin website or CBD website.**

By cataloguing indigenous vegetable (IV) species, domesticating selected species & promoting their value to producers & consumers, this project will support the host countries in the implementation of Articles 7 (20%), 9 (15%) & 10(25%), with particular emphasis on agricultural biodiversity (20%) & traditional knowledge, innovations & practices (20%). At the onset of the project, contact will be made with the national focal points, Mr. Modibo Cisse, Water and Forestry Engineer at the Direction Nationale de Conservation de la Nature, Mali & Mr. Raphael Ogouchi, Directeur Adjoint de l'Environnement, Environment Ministry, Benin

**12. How does this project meet a clearly identifiable biodiversity need or priority defined by the host country? Please indicate how this work will fit in with National Biodiversity Strategies or Environmental Action Plans, if applicable.**

Please also refer to the 'concept note' in the Stage 1 application. This work fits in with the overall objectives of the two "Stratégie et Plan d'Action en Matière de Diversité Biologique" of Mali (2000) and Benin (2002) (copies were sourced and discussed with partners during the pre-project visits to Mali and Benin). Although indigenous vegetables are not expressly mentioned, the Mali document recommends the survey, collection & conservation of local varieties of cultivated plants, the identification of threatened species, the development of local capacity on the evaluation & use of phylogenetic resources of secondary crops & underutilised species, & the understanding of traditional knowledge & practices which may help the conservation of biological diversity. The latter may be particularly applicable to the use of wild plants, recognised to be in some cases of considerable importance as food resources. The Benin document similarly recommends the regular evaluation of biological potential, the establishment of a gene bank of threatened species, the identification & promotion of indigenous practices which conserve biodiversity, the genetic improvement of species, with strong involvement of grassroots stakeholders, particularly women.

**13. If relevant, please explain how the work will contribute to sustainable livelihoods in the host country.**

Both countries emphasise the need to develop & reduce poverty through the improved management of biological diversity. This work will directly contribute to sustainable livelihoods in three ways: 1) Helping poor people manage their wild vegetable resources more effectively, averting the extinction of widely used threatened species; 2) Initiating a programme of domestication of important threatened wild species, which can then be introduced into vegetable gardens, particularly for the 'hunger gap' period; 3) Transferring knowledge between regions & between the two countries (where relevant), to improve existing cultivation & preparation practices of IVs (the cultivation of IVs is particularly the domain of women).

**14. What will be the impact of the work, and how will this be achieved? Please include details of how the results of the project will be disseminated and put into effect to achieve this impact.**

This project will achieve direct impact by supporting IER & INRAB in their mandate to collect & conserve local varieties of cultivated plants, & the countries' initiatives on biological diversity, specifically to identify threatened species & protect wild products from overexploitation, drawing on traditional resource management knowledge. It will do so by initiating inventories of IVs (countrywide for Mali, in the north for Benin), collecting & conserving seed specimens, domesticating threatened species & distributing them to villages for on-farm trials, gathering traditional knowledge about cultivation or sustainable collection practices from the wild, uses & preparation & re-disseminating this knowledge where it is disappearing. The tools for awareness-raising will consist of pamphlets in the local languages & training sessions in villages, & national radio programmes. Also, a special meeting will be held for policy-makers. An indirect impact will be the enhancement of IER and INRAB's staff capacity in prospecting and conserving IVs, surveying techniques for gathering traditional knowledge and running participatory domestication trials.

**15. How will the work leave a lasting legacy in the host country or region?**

The work will leave a lasting legacy by collecting essential missing information on the status of IVs & establishing seed banks in the two countries, which will constitute the foundation for future in-country research in this field. It will raise awareness at grassroots and policy-making levels, on a much-neglected but very important topic, thus ensuring that it takes an important place on the research agendas of the countries, after the close of the project. It will do so by making sure that the project is of relevance & interest to users, in particular women's groups, who will be involved from the start. The project will present its results at the annual IER & INRAB stakeholder meetings which are a forum for farmer stakeholders to express their priorities for the research agenda for the following year, & for the researchers to disseminate results of the past year's work. Stakeholder priorities are published in proceedings & the following year's protocols designed by the scientists are evaluated according to the priorities set. Active engagement by the partners with stakeholders at these meetings will result in IVs being placed high on the research agenda for following years.

**16. Please give details of a clear exit strategy and state what steps have been taken to identify and address potential problems in achieving impact and legacy.**

The exit strategy rests upon four elements: 1) A participatory approach to the development & management of activities in all phases of the work which will ensure that partners are empowered to take the activities forward independently; 2) A strategy of yearly engagement with the IER & INRAB stakeholder meetings as described in Q15, so that IV research is placed on the long-term research agendas; 3) Establishment of new seed banks; 4) Capacity building through comprehensive involvement of local partners & delivery of grant proposal skills seminars. Potential problems in achieving legacy & impact were discussed at the pre-project stages. Early engagement with different user groups will ensure concrete relevance of later scientific output. To avoid disruption caused by staff changes country teams include at least four senior participants. Electricity supply is unpredictable so to avert losses in the seed collection, it was agreed to establish a backup at AVRDC – The World Vegetable Centre Mali offices which have a generator, & eventually arrange to send seed samples (in accordance with article 15 of the CBD) to AVRDC headquarters, for long-term conservation.

**17. How will the project be advertised as a Darwin project and in what ways will the Darwin name and logo be used?**

During the second year of the project, the press officer at the University of Wales Bangor will write a press release (in collaboration with the partners) & circulate it to potentially interested press contacts in Wales & UK & will also provide advice for the development of press releases in the host countries (contact points will be discussed at the opening meeting). A meeting with the press officer will take place at the onset of the project to discuss materials & photographs required. The Darwin name & logo will appear alongside the partners' logo on all publications & on the project web-site, & all outputs will acknowledge Darwin funding & bear a disclaimer stating that the opinions & views expressed are the responsibility of the partners.

**18. Will the project include training and development? Please indicate who the trainees will be and criteria for selection and that the level and content of training will be. How many will be involved, and from which countries? How will you measure the effectiveness of the training and will those trained then be able to train others? Where appropriate give the length and dates (if known) of any training course. How will trainee outcomes be monitored after the end of the training?**

The project host country partners are experienced horticulturalists, thus the training component is relatively small. The UK partners will train the enumerators on interviewing techniques to prepare them for fieldwork activities, in conjunction with the senior host partners. Special 'participatory on-farm research' sessions will be delivered to the host partners by one of the UK partners (August 2007), & additionally the other UK partner will offer scientific writing skills for peer-reviewed publications & for project development, to the junior staff at IER & INRAB (March 2008).

## LOGICAL FRAMEWORK

19. Please enter the details of your project onto the matrix using the note at Annex B of the Guidance Note. This should not have substantially changed from the Logical Framework submitted with your Stage 1 application. Please highlight any changes.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<b>Goal:</b> <b>To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but poor in resources to achieve</b> <ul style="list-style-type: none"> <li>• the conservation of biological diversity,</li> <li>• the sustainable use of its components, and</li> <li>• the fair and equitable sharing of benefits arising out of the utilisation of genetic resources</li> </ul>			
<b>Purpose</b> Improved conservation & sustainable use of biodiversity in Mali & Benin by cataloguing indigenous vegetable (IV) species, domesticating selected species & promoting their value to producers & consumers.	<ul style="list-style-type: none"> <li>• Comprehensive list of indigenous species used as vegetables in Mali &amp; Benin produced</li> <li>• Domestication trials of threatened species initiated</li> <li>• IV research included as a priority topic by the end of yr 3 by IER &amp; INRAB boards</li> </ul>	Research programme reports IER & INRAB board reports	Mali & Benin governments maintain the same level of or increase financial support for agricultural research & allow this to be tied in to conservation measures
<b>Outputs</b> <u>1</u> Catalogue of IV biodiversity richness, uses & threats produced.  <u>2</u> Seed banks established.  <u>3</u> Selected highly used & threatened IV species domesticated  <u>4</u> Dissemination material & training for different stakeholders delivered	<u>1</u> Catalogue of IV biodiversity & disappearing species available for 6 regions in Mali & northern Benin by end yr 2 <u>2</u> Seed samples collected country-wide in Mali and Benin documented & stored in fridges in IER & INRAB & backup at AVRDC by Feb 07 <u>3.1</u> At least one species for domestication trials per region in Benin & Mali selected by Jan 07 <u>3.2</u> Results from domestication trials with different field techniques available by Jan 09 <u>4.1</u> At least one major awareness-raising workshop delivered in both countries by Nov 08 <u>4.2</u> Pamphlets on conservation needs, cultivation techniques, preparation & recipes produced for both countries by Nov 08 <u>4.3</u> In each survey village pamphlets distributed & training delivered by Mar 09 <u>4.4</u> Three ½ hour radio programmes produced & aired by Apr 09	The following information will be made available on the project web-site, which will feature the Darwin Initiative logo:  Regional & country species lists & reported threats published  Reports on cultivation practices published  Uses & preparation manuals, recipe collections published  List of seed samples collected & stored made available through the AVRDC website  Domestication trial reports  Workshop minutes & reports published (website)  Radio programme material  Articles published in newsletters & peer-reviewed journals	Farmers are willing to cooperate with the enumerators during the survey  Plants which have gone to seed can be found for seed collection  Electricity supply is stable  Sufficient numbers of policy makers can attend the workshops  Farmers find the training sessions sufficiently valuable to attend  Radio stations are interested in broadcasting the dissemination programmes  Aviation and other fuel prices do not rise unexpectedly (affecting travel costs)

<p><u>5</u> Training &amp; country-to-country expertise exchange delivered</p>	<p><u>5</u> Benin-Mali-UK-expertise exchange &amp; training workshops carried out once a year</p>		
<p><b>Activities</b></p> <p><u>1</u> Surveys</p> <p><u>2</u> Seed &amp; sample collection</p> <p><u>3</u> Domestication trials</p> <p><u>4.1</u> Development of peer-reviewed publications, best practice pamphlets &amp; radio programmes</p> <p><u>4.2</u> Awareness-raising at grassroots &amp; policy levels</p> <p><u>5</u> Capacity-building activities for partners</p>		<p><b>Activity Milestones</b></p> <p><u>1</u> Survey enumerators trained (6 in Mali, 3 in Benin) by June 06 &amp; questionnaires agreed; surveys to identify IV species found in six regions in Mali &amp; three in Benin, describe cultivation practices &amp; uses &amp; preparation of IVs completed by <b>Mar 07</b>; data inputting &amp; analysis by Jul 07; data write-up by May 08</p> <p><u>2</u> Seed bank facilities established Jun 06; <b>seed &amp; sample collection largely completed by Feb 07</b> (but repeat visits may occur later depending on seed production periods)</p> <p><u>3</u> IVs for domestication trials selected in Jan 07; domestication trials begin May 07; trials for report write-up completed by Jan 09.</p> <p><u>4.1</u> Reports/peer-reviewed publication joint write-up commences May 08; pamphlets prepared by Nov 08; pamphlets distributed by Mar 09; radio programmes prepared by Dec 08; radio programmes aired Jan-Apr.</p> <p><u>4.2</u> Sourcing further funding commences Sep 07; awareness-raising workshop for policy makers Nov 08; training sessions on the need for IV conservation, cultivation techniques, preparation techniques, recipe exchanges, delivered in each survey village by Mar 09.</p> <p><u>5</u> Introductory Benin-Mali-UK expertise exchange workshops in May 06 to finalise Detailed Work Plan. Mid-term meeting in Aug 07; final summary workshop Feb 09. Partners to be in close e-mail contact through-out.</p>	

**20. Provide a project implementation timetable that shows the key milestones in project activities.**

<b>Project implementation timetable</b>		
<b>Date</b>	<b>Financial year</b>	<b>Key milestones</b>
May 06	Apr-Mar 2006/07	Opening workshop in Benin for UK-Mali-Benin partners
May 06		Questionnaires developed jointly by all partners
June 06		Enumerators trained in both countries
June 06		Seed bank facilities established
July 06		Survey is launched in both countries
July 06		Seed and sample collection commences
August 06		Monitoring and assessment reports
September 06		Interim visit to Mali; Data inputting and analysis commences
October 06		Half-year report
December 06		Monitoring and assessment reports
January 07		IV species selected for domestication trials
February 07		Seed and sample collection largely completed (but repeat visits may occur later depending on seed production periods)
March 07		Surveys completed
March 07	Data write-up commences	
April 07	Apr-Mar 2007/08	Monitoring and assessment reports
April 07		Annual report
May 07		Domestication trials commence
July 07		Data analysis completed
August 07		Monitoring and assessment reports
August 07		Interim workshop in Mali to exchange results for UK-Mali-Benin partners
August 07		1 <sup>st</sup> Visit by UK partner to Mali and Benin for domestication trials
September 07		Search for funding sources to extend lifetime of the project commences (and continues to the end of the project and beyond)
October 07		Half-year report
December 07		Monitoring and assessment reports
March 08	2 <sup>nd</sup> Visit by UK partner to Mali and Benin for domestication trials	
April 08	Apr-Mar 2008/09	Monitoring and assessment reports
April 08		Annual report
May 08		Data write-up completed; Publication write-up commences (on-going to the end of the project and beyond because of long publishing times)
May 08		Pamphlet preparation commences
Aug – Sep 08		Visit by UK partner to Mali (domestication trials and dissemination)
Oct – Nov 08		Visit by UK partner to Benin (domestication trials and dissemination)
Aug – Oct 08		Monitoring and assessment reports
November 08		Half-year report
November 08		Pamphlet preparation completed
November 08		Radio programme development commences
November 08		Workshop for awareness raising amongst policy-makers in both countries
December 08		Monitoring and assessment reports
December 08		Pamphlet distribution commences in both countries
December 08		Farmers/village training sessions commence in both countries
January 09		Domestication trials completed
January – April 09		Radio programme airing
February 09		Closing workshop in Mali for UK-Mali-Benin partners
March 09		Pamphlet distribution completed
March 09		Farmer/village training sessions completed
April 09	End of project report sent to Darwin Initiative	
May 06 – April 09	Quarterly statements of income and expenditure according to Darwin schedule or terms and conditions	

**21. Set out the project's measurable outputs using the separate list of output measures.**

<b>PROJECT OUTPUTS</b>		
<b>Year/Month</b>	<b>Standard output number</b>	<b>Description (include numbers of people involved, publications produced, days/weeks etc.)</b>
Jun 06	6A	Nine enumerators trained on surveying and seed collection techniques (6 Mali, 3 Benin)
Jun 06	6B	1 week Mali; 1 week Benin
Aug 07	6A	Four research scientists/assistants trained on participatory farm trials (3 Mali; 1 Benin)
Aug 07	6B	1 week Mali; 1 week Benin
Mar 08	6A	10 junior staff trained in scientific writing skills (5 Mali, 5 Benin)
Mar 08	6B	1 week Mali; 1 week Benin
Feb 09	6A	6 senior local staff trained in UK-Benin-Mali annual workshops to promote exchange of project experience (3 Mali, 3 Benin)
May 06, Aug 07, Feb 09	6B	1 week Mali; 1 week Benin; 1 week Mali
Nov 08	7	1 training materials: 5 pamphlets on sustainable cultivation practices, threats to IVs, preparation of IVs, recipes
2006-2009	8	17 weeks in Mali; 15 weeks in Benin
Apr 09	11A	At least 2 publications to be published in peer-reviewed journals
Apr 09	11B	At least 2 publications to be submitted to peer-reviewed journals
Feb 07	13A	One species reference collection established at IER; one joint collection at AVRDC-Mali; one duplicate collection at AVRDC-HQ for long-term conservation
Feb 07	13B	One species reference collection enhanced at INRAB (Benin)
Nov 08	14A	2 workshops to be organised for policy makers (1 Mali, 1 Benin); 30 village-level training workshops in Mali and Benin
est. end 07	14B	1 conference attended to disseminate Darwin findings
mid-late 08	15A	2 national-level press releases in the host countries
end 08	15C	1 national-level press release in the UK
mid 07	15D	1 local-level press release in the UK
start Sep 06	17B	1 dissemination network ( <i>IndigenoVeg</i> ) to be enhanced by IER, Mali inclusion
Apr 09	19A	6 radio features (3 Mali; 3 Benin)
Apr 09	19D	2 local radio interviews (1 Mali; 1 Benin)
Jun 06	20	£7415 for seed bank equipment and computing resources
May 07	22	At least 2 (1 Mali; 1 Benin)
	23	£55,661 plus £69,000 estimated vehicle costs value plus £400 land resources

**PROJECT BASED MONITORING AND EVALUATION**

**22. Describe, referring to the Indicators in the Logical Framework, how the progress of the project will be monitored and evaluated, including towards delivery of its outputs and in terms of achieving its overall purpose. This should be during the lifetime of the project and at its conclusion. Please include information on how host country partners will be included in the monitoring and evaluation.**

The UK & host country partners will maintain constant e-mail contact throughout the lifetime of the project, to keep each other informed on progress in the activities. E-mail connection to the two countries is improving constantly, but can be unreliable at times. If the UK coordinator perceives a gap in the exchanges she will contact the partners by phone. All of the partners will engage to write a quarterly assessment report for circulation within the group, using a checklist which will be jointly developed at the opening workshop in May 06. This checklist, which will match the full project timetable to the logical framework, will enable partners at each stage to monitor to what degree different activities have been carried out, how this relates to expected achievements at a certain point in time, what preparation work is required to start the next set of activities, & to evaluate if any steps need to be taken to correct potential delays. This tool will allow partners to check their progress towards the delivery of the outputs which will be used to judge the success of the project. Activities will also be reviewed during the course of the visits by the UK partners to the host countries, but the two major reviewing activities will take place during the interim & final workshops for all partners held in August 07 & February 09. By the August 07 workshop partners should have delivered output 2 & be on course to achieve more than 50% of output 1 & 3, measured by indicators 1 & 3.1. By the February 08 workshop partners should have delivered output 3 (indicator 3.2) & 50% of output 4 (indicators 4.1 & 4.2) & fully engaged in completing activities related to output 4 (indicators 4.3 & 4.4). Output 5 will be partially achieved every year & fully delivered by the end of the project (indicator 5).



### 23. FINANCIAL ASPECTS

Please state costs by financial year (April to March). Use current prices - do not include any allowance for assumed future inflation. Show Darwin funded items separately from those funded from other sources.

**Table A: Staff time. List each member of the team, their role in the project and the percentage of time each would spend on the project each year.**

	2005/06 %	2006/07 %	2007/08 %	2008/09%
<b>UK project team member and role</b>				
Dr. Margaret Pasquini – Project leader & coordinator – responsible for data analysis & write-up; proposal writing	80	60	60	60
Dr. Einir Young – As Deputy Director of CAZS-NR & experienced project manager (current portfolio around £) will be responsible for mentoring Dr. Pasquini & providing backup & support as & when necessary.	20	20	20	20
Mr. Dominic Breslin – Responsible for financial administration	10	10	10	10
<b>Host country/ies project team members and role</b>				
Dr. Kadiatou Touré Gamby – Coordinator for Mali – Responsible for dissemination (IER)	20	10	15	15
Mme. Haby Sanou Diarra – Responsible for IV characterisation (IER)	10	20	20	10
Mme. Haoua Traoré Sissoko – Responsible for surveys (IER)	20	5	10	10
Dr. Aissata Traoré Théra – Responsible for domestication trials (IER)	10	15	15	10
Mme. Françoise Assogba-Komlan – Coordinator for Benin – Responsible for domestication trials & awareness-raising (INRAB)	30	20	20	20
M. Alphonse Singbo – Responsible for the evaluation of the profitability of new technologies (INRAB)	20	10	10	10
Dr. Sikirou Rachidatou – Phytopathologist advisor for the domestication trials in both countries (INRAB )	5	20	20	5
Mme Prudent Anihouvi – Involved in the domestication trials (INRAB)	30	40	30	10
Dr Dansi Alexandre – Geneticist involved in the survey & inventory on IVs (University)	30	10	10	10
Mr Enoch Achigan –Geneticist Responsible for the survey, inventory characterization during the grain collection on IVs (University)	20	20	20	10
Dr Jean Claude CODJIA (Romaric Vihotogbe) – Involved in the survey & inventory on IVs (University)	20	20	10	10

**Table B: Salary costs. List the project team members and show their salary costs for the project, separating those costs to be funded by the Darwin Initiative from those to be funded from other sources.**

Project team member	2006/2007		2007/2008		2008/2009		2009/2010	
	Darwin	Other	Darwin	Other	Darwin	Other	Darwin	Other
Dr. Margaret Pasquini	22,375	None	19,053	None	20,271	None	1,706	None
Dr. Einir Young	4,369	4369	4,766	4766	4,766	4766	397	397
Mr. Dominic Breslin	None	3256	None	3552	None	3552	None	296
Dr. Kadiatou Touré Gamby	None	566	None	309	None	463	None	39
Mme. Haby Sanou Diarra	None	279	None	609	None	609	None	25
Mme. Haoua Traoré Sissoko	None	410	None	112	None	224	None	19
Dr. Aissata Traoré Théra	None	161	None	264	None	264	None	15
Mme. Francoise Assogba-Komlan	None	752	None	547	None	547	None	46
M. Alphonse Singbo	None	365	None	199	None	199	None	17
Dr. Sikirou Rachidatou	None	103	None	448	None	448	None	9
Mme. Prudent Anihouvi	None	513	None	746	None	560	None	16
Dr. Dansi Alexandre	None	752	None	274	None	274	None	23
M. Enoch Achigan	None	410	None	448	None	448	None	19
Dr. Jean Claude Codjia	None	502	None	547	None	274	None	23
<b>TOTAL COST OF SALARIES</b>	26,744	12,438	23,819	12,821	25,037	12,628	2,103	944

**Table C. Total costs. Please separate Darwin funding from other funding sources for every budget line**

	2006/2007	2007/2008	2008/2009	2009/2010	TOTAL
<b>Rents, rates, heating , cleaning, overheads</b>					
• Darwin funding					
• Other funding					
<b>Office costs eg postage, telephone, stationary</b>					
• Darwin funding					
• Other funding					
<b>Travel and subsistence</b>					
• Darwin funding					
• Other					
<b>Printing</b>					
• Darwin funding					
• Other					
<b>Conferences, seminars etc.</b>					
• Darwin funding					
• Other funding					
<b>Capital items/equipment (please break down)</b>					
• Darwin funding					
2 small fridges					
1 big fridge					
3 dessicators					
2 laptops with modem connection, printers					
Connection					
• Other					

<b>Other costs (including Audit costs to a maximum of £500) (Please specify and break down)</b>					
• Darwin funding					
Secretaries data inputting (salary)					
Surveyors (salary)					
Seed collectors (salary)					
Domestication trial assistants (salary)					
Casual labourers (salary)					
Contracting designer/interpreter for pamphlets					
Phenological study and seed management					
Seed storing costs and maintenance					
Domestication trial inputs					
General supplies					
Preparation of radio broadcast material					
Audit fees					
• Other funding					
Audit fees					
<b>Salaries (from previous table)</b>					
• Darwin funding					
• Other funding					
<b>TOTAL PROJECT COSTS</b>					
<b>TOTAL COSTS FUNDED FROM OTHER SOURCES</b>					
<b>TOTAL DARWIN COSTS</b>					

#### 24. How is your organisation currently funded?

CAZS Natural Resources is a self-funding, semi-autonomous unit within the University of Wales Bangor. It is not in receipt of core funding from the University & generates its income from a variety of sources. Its main sources of funding arise from research, research management, specialised teaching & training and consultancy activities. The UK team members are all CAZS Natural Resources staff members.

#### 25. Provide details of all other funding sources identified in Question 23 that will be put towards the costs of the project, including any income from other public bodies, private sponsorship, donations, trusts, fees or trading activity. Please include any additional funding the project will attract to carry out addition work during or beyond the project lifetime. Indicate those funding sources which are confirmed.

The host country partners will be contributing staff time & salaries for a total of 11 individuals (four in Mali & seven in Benin). In addition, INRAB will contribute 5% overheads on the project costs (the normal overhead rate is 10%). CAZS Natural Resources will contribute 10% staff time & salaries for Dr. Einir Young & Mr. Dominic Breslin, & 40% overheads on these salary costs. CAZS Natural Resources will also contribute towards travel costs. The opening meeting in Benin is scheduled for May 2006, coinciding with an *IndigenoVeg* networking meeting organised by Drs. Pasquini & Young (see question 10). The launch of the Darwin Initiative will occur immediately after this meeting. Another *IndigenoVeg* meeting is scheduled in September 2006 in Mali, again enabling Drs. Pasquini and Young to provide added value to the Darwin project by interacting with the Darwin partners and gaining an update on the survey & seed collection activities. There is new interest in the applied agronomics of indigenous vegetables elsewhere in Africa, & the proposed Darwin project is therefore expected to create considerable spin-off activity in the field, including significant joint funding potential. Sources of funding which will be explored include the European Union Framework 7, the African Academy of Sciences & the International Development Research Centre (IDRC). Collaborations will be sought with relevant international organisations, including AVRDC – The World Vegetable Centre & the International Plant Genetic Resources Institute (IPGRI).

26. Please give details of any further funding resources sought from the host country partner institution (s) or others for this project that are not already detailed in Questions 23 and 25. This will include donations in kind or un-costed support eg accommodation.

The host country partner institutions will provide land resources (estimated value £) for the domestication trials & will also provide IER & INRAB vehicles (vehicle costs are estimated at £) particularly to support the survey activities & any necessary in-country travel during visits of the UK partners.

#### FCO NOTIFICATIONS

Please check the box below if you think that there are sensitivities that the Foreign and Commonwealth Office will need to be aware of should they want to publicise the project's success in the Darwin competition in the host country.

Please indicate below whether you have contacted the local UK embassy or High Commission to discuss security issues (see Project Guidance for advice on this); and attach any advice you have received from them to your application form.

Yes

Yes, advice attached

No

#### CERTIFICATION 2006/7

On behalf of the company (*delete as appropriate*)

University of Wales Bangor

I apply for a grant of £72,944 in respect of expenditure to be incurred in the financial year ending 31 March 2007 on the activities specified in questions 19 and 20.

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful.

I enclose [WHERE NECESSARY] a copy of the organisation's most recent audited accounts and annual report, CVs for project principals and letters of support.

Name (block capitals)	Mr Paul Storey
Position in the organisation	Accountant University of Wales Bangor

Signed

Date:

Please return this form by e-mail to ECTF at [darwin-applications@ectf-ed.org.uk](mailto:darwin-applications@ectf-ed.org.uk) by 13 January 2006. Please put the title and application number of the proposed project into the subject line of the e-mail. As much of the supporting documentation as possible should be sent along with the e-mailed application. However, if you are e-mailing supporting documentation separately please include in the subject line an indication of the number of e-mails you are sending (eg whether the e-mail is 1 of 2, 2 of 3 etc). In addition, hard copies of all applications and supporting documents should be submitted to the Darwin Applications Management Unit, c/o ECTF, Pentlands Science Park, Bush Loan, Penicuik EH26 0PH postmarked not later than 13 January 2006.

DATA PROTECTION ACT 1998: Applicants for grant funding must agree to any disclosure or exchange of information supplied on the application form (including the content of a declaration or undertaking) which the Department considers necessary for the administration, evaluation, monitoring and publicising of the Darwin Initiative. Application form data will also be held by contractors dealing with Darwin Initiative monitoring and evaluation. It is the responsibility of applicants to ensure that personal data can be supplied to the Department for the uses described in this paragraph. A completed application form will be taken as an agreement by the applicant and the grant/award recipient also to the following:- putting certain details (ie name, contact details and location of project work) on the Darwin Initiative and Defra websites(details relating to financial awards will not be put on the websites if requested in writing by the grant/award recipient); using personal data for the Darwin Initiative postal circulation list; and sending data to Foreign and Commonwealth Office posts outside the United Kingdom, including posts outside the European Economic Area. Confidential information relating to the project or its results and any personal data may be released on request, including under the Environmental Information Regulations, the code of Practice on Access to Government Information and the Freedom of Information Act 2000.