

FRANCE – MOROCCO

**Scientific impact of the program PRAD
(2007-2014)**

MESRI-DAEI / MEAE

2020

<http://www.enseignementsup-recherche.gouv.fr>

GENERAL PRESENTATION OF THE PROGRAM

Creation : 1995

The aim of this program is to promote new collaborations in the field of Agronomy between French and Moroccan researchers by enhancing forge long-term collaborations, creating networks or taking part to European projects while training Moroccan PhD students.

Total budget (France + Morocco) : around 180 000€ / year

>> including budget from the French part : around 140 000 € / year

>> including budget from the Moroccan part : around 40 000 € / year

Average budget per project (France + Morocco) : around 7 000€ / year

Number of new funded projects per year : around 9

From 2007 to 2014 :

248 applications submitted

73 projects funded

DATA SOURCES

Campus France (2007-2014)

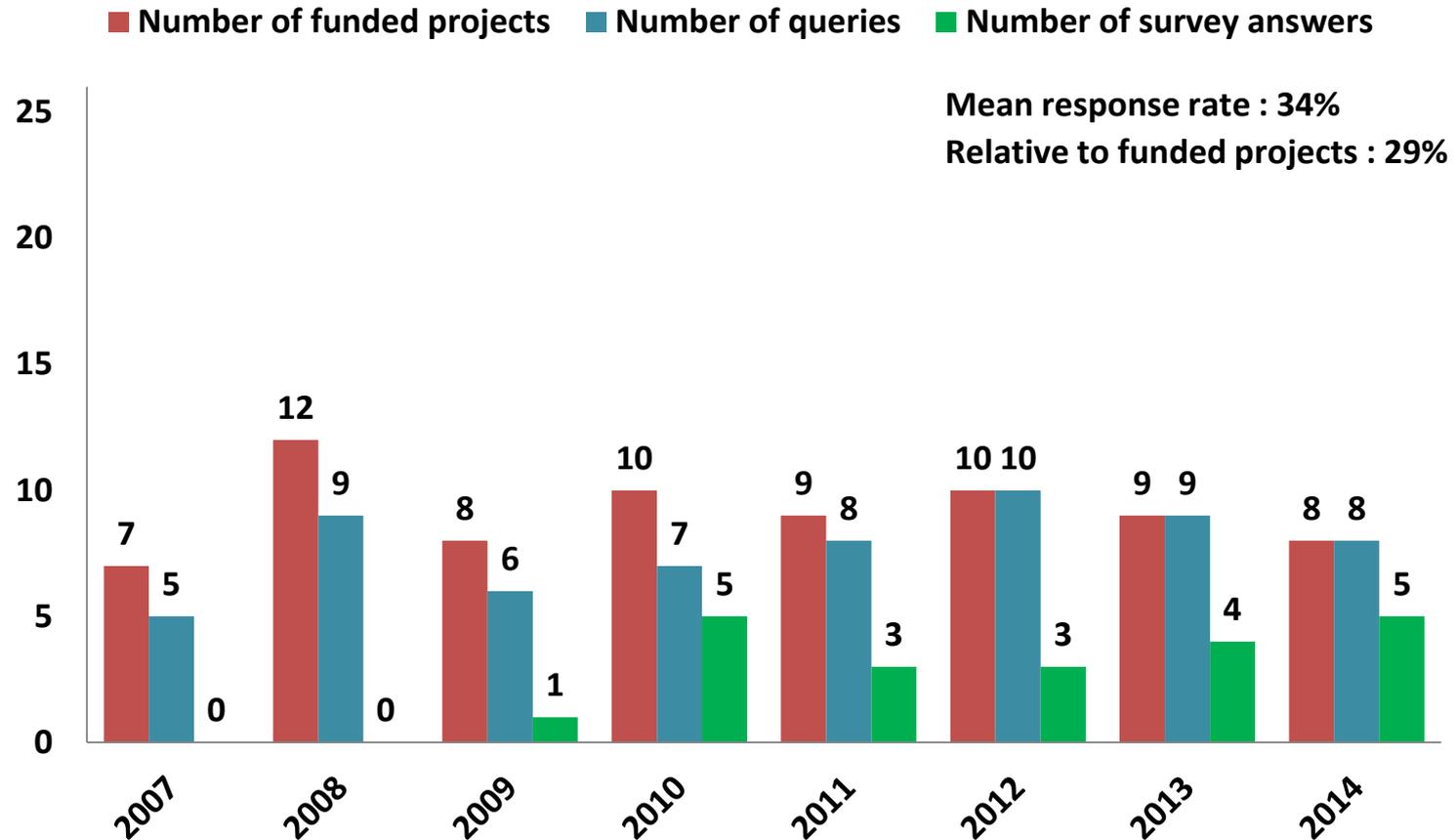
- Information about the PRAD program applications
- List of mobilities (from France to Morocco and from Morocco to France)

Survey (2007-2014)

- Target : French Principal Investigators of selected projects between 2007 and 2014
- Survey duration : 7 weeks between August and October 2020
- **34%** response ratio (21 respondents for 62 queries)

ANSWERS TO THE SURVEY

Average response rate to the survey : **34 % (21 answers)**

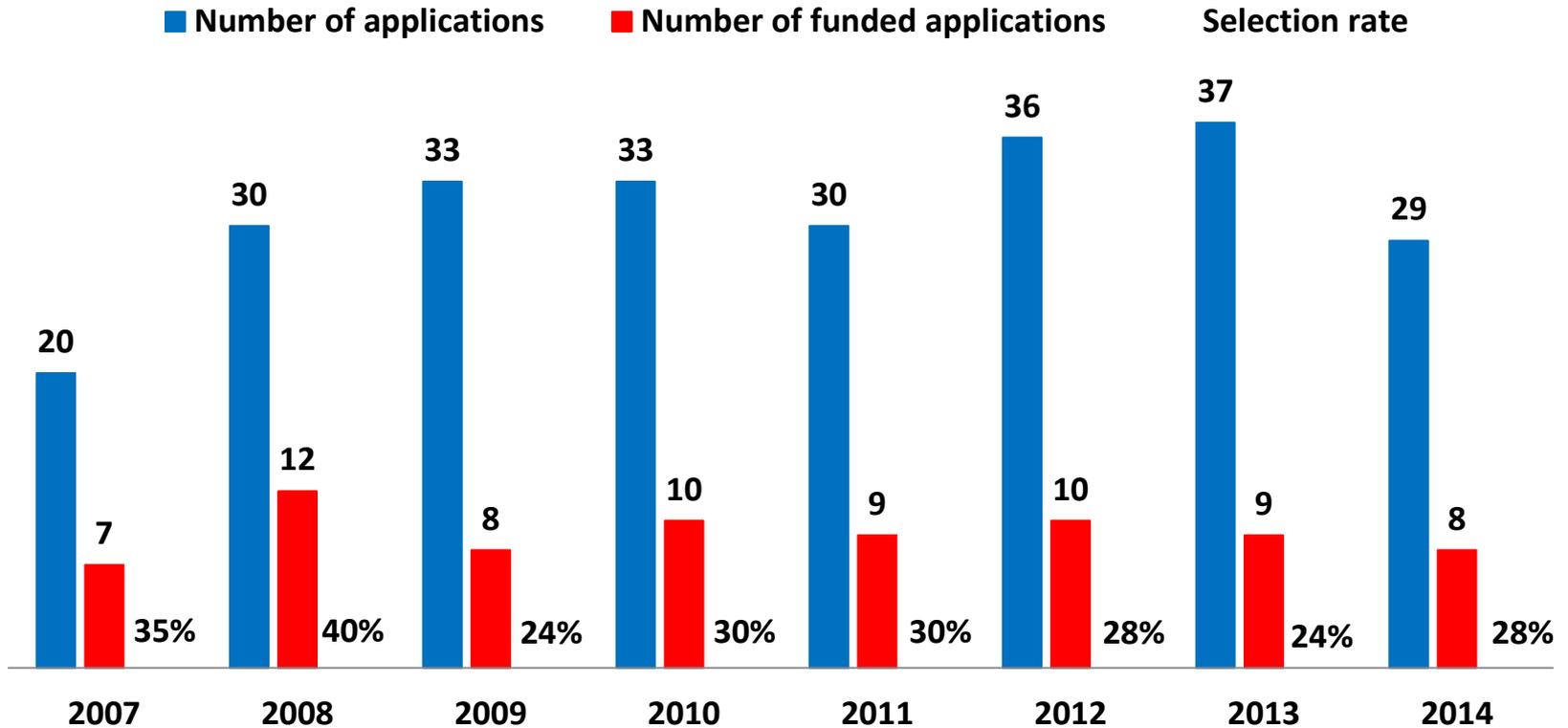


73 funded projects between 2007 and 2014, 62 valid email addresses

2007-2014 Key Points

NUMBER OF APPLICATIONS AND SELECTION RATE

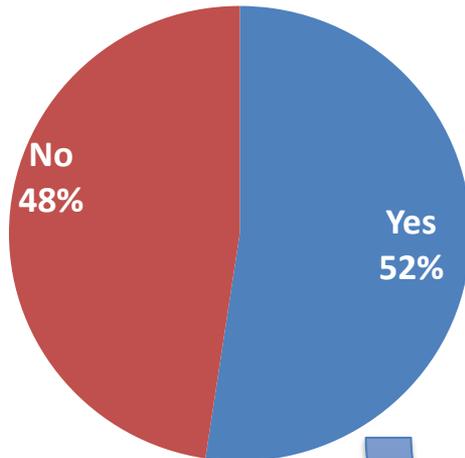
Average selection rate from 2007-2014: **29%**



Rather constant number of applications between 2008 and 2014

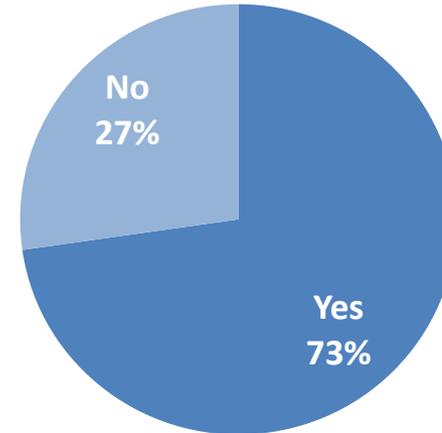
BEFORE THIS PRAD PROJECT (1/2)

Did you already cooperate with Morocco in the past ?



Data from 21 responses

If yes, was it with the same partner?



Data from 11 responses

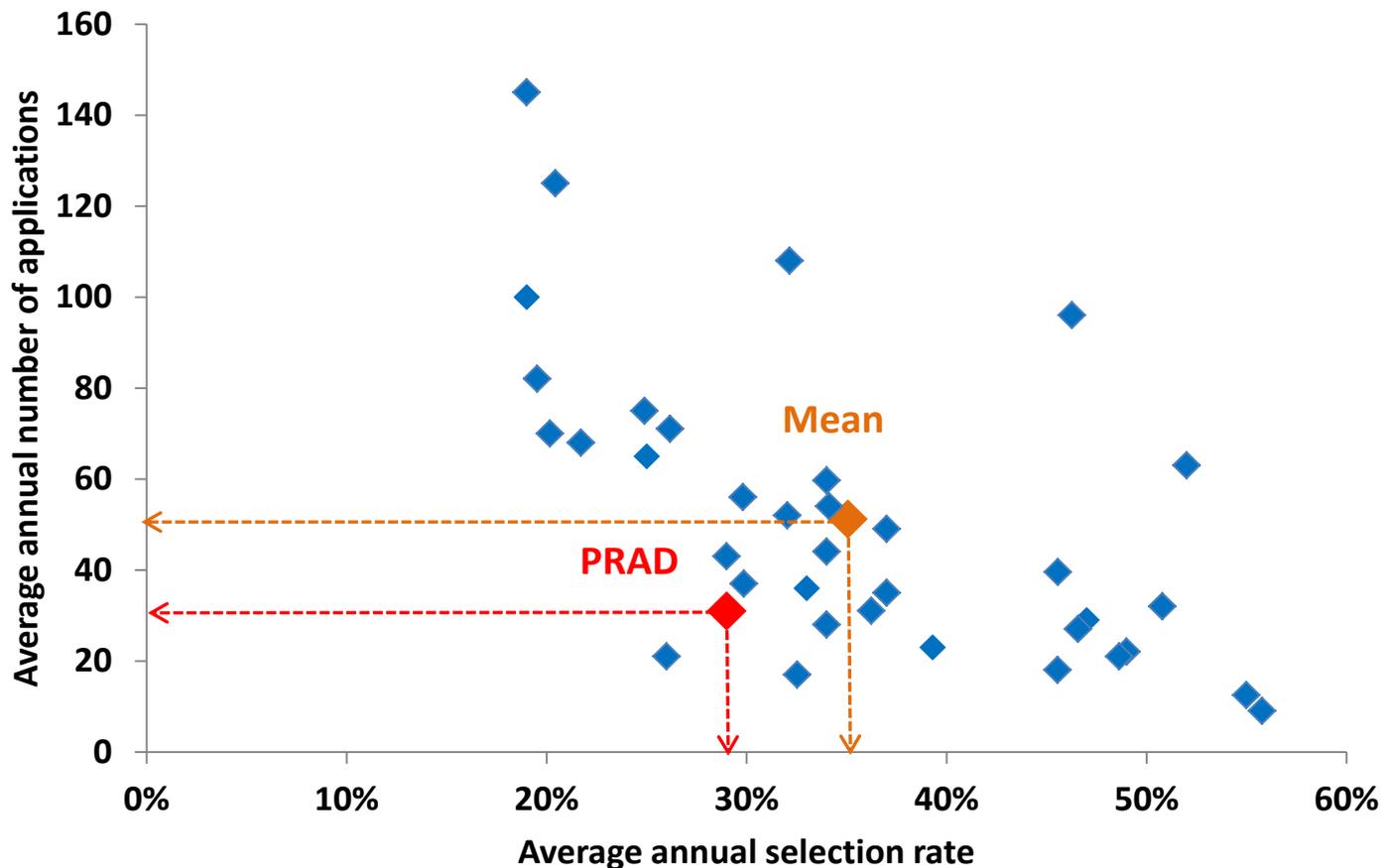
BEFORE THIS PRAD PROJECT (2/2)

With which scientific collaboration programme ?	
Programme PRAD	57%
PHC Volubilis	21%
Others	21%

Plus 8 previous cooperations based on other exchanges (co-publication, meetings, joint PhD...)

Data from 11 responses

NUMBER OF APPLICATIONS VS SELECTION RATE (COMPARISON BETWEEN 37 DIFFERENT BILATERAL PROGRAMS)

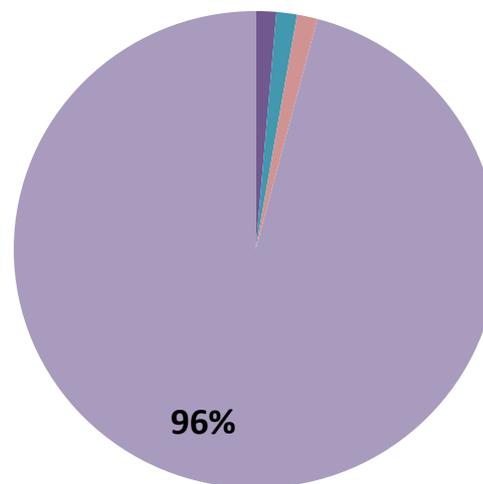
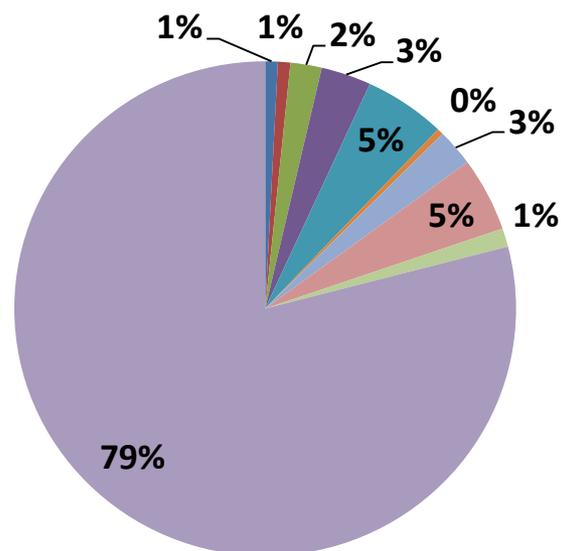


Average selection rate for 2007-2014 : 29% vs 35% mean
Average annual number of applications 2007-2014 : 31 vs 51 mean

SCIENTIFIC DOMAINS OF PROJECTS 2007-2014

Number of applications : **248**

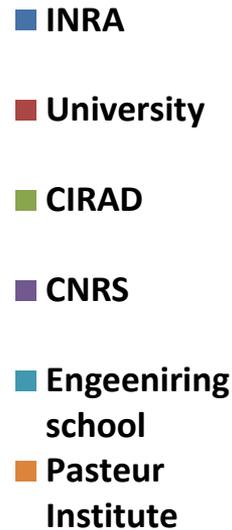
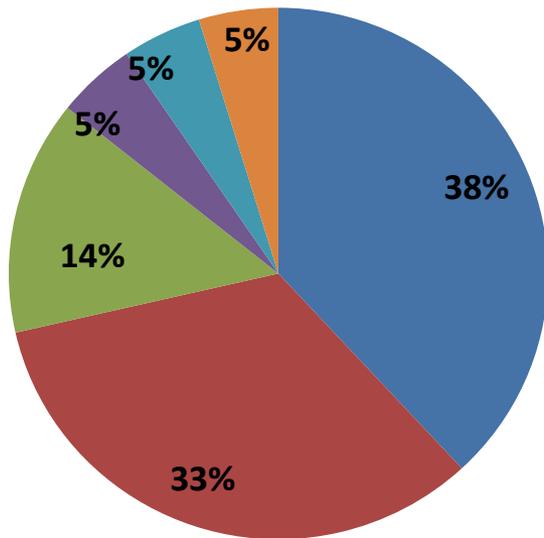
Number of funded projects : **73**



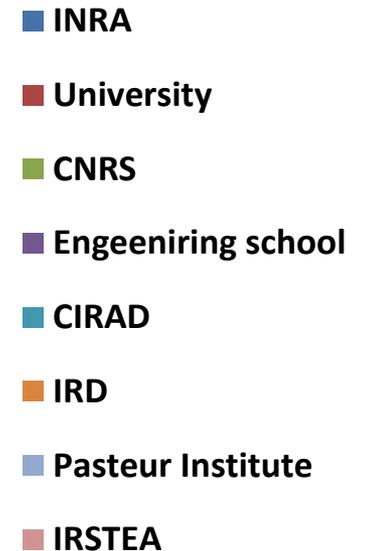
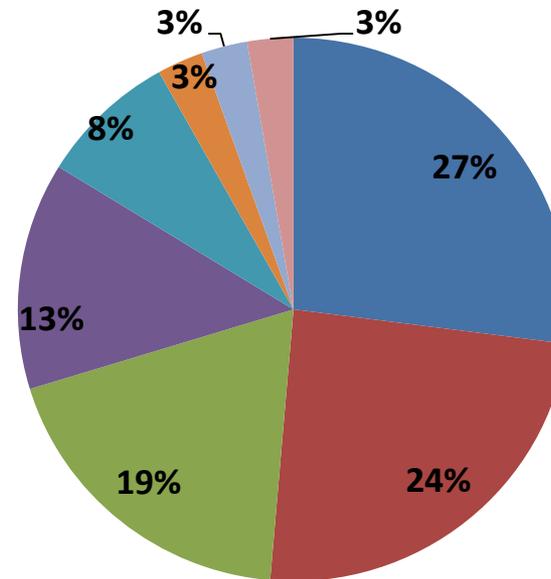
- | | |
|--------------------------------|------------------------|
| ■ Mathematics | ■ Physics |
| ■ Marine/Earth/Planet Sciences | ■ Chemistry |
| ■ Biology and Health | ■ Humanities |
| ■ Social Sciences | ■ Engineering Sciences |
| ■ Information Technology | ■ Agronomy/Ecology |

FRENCH PARTICIPATING INSTITUTIONS 2007-2014

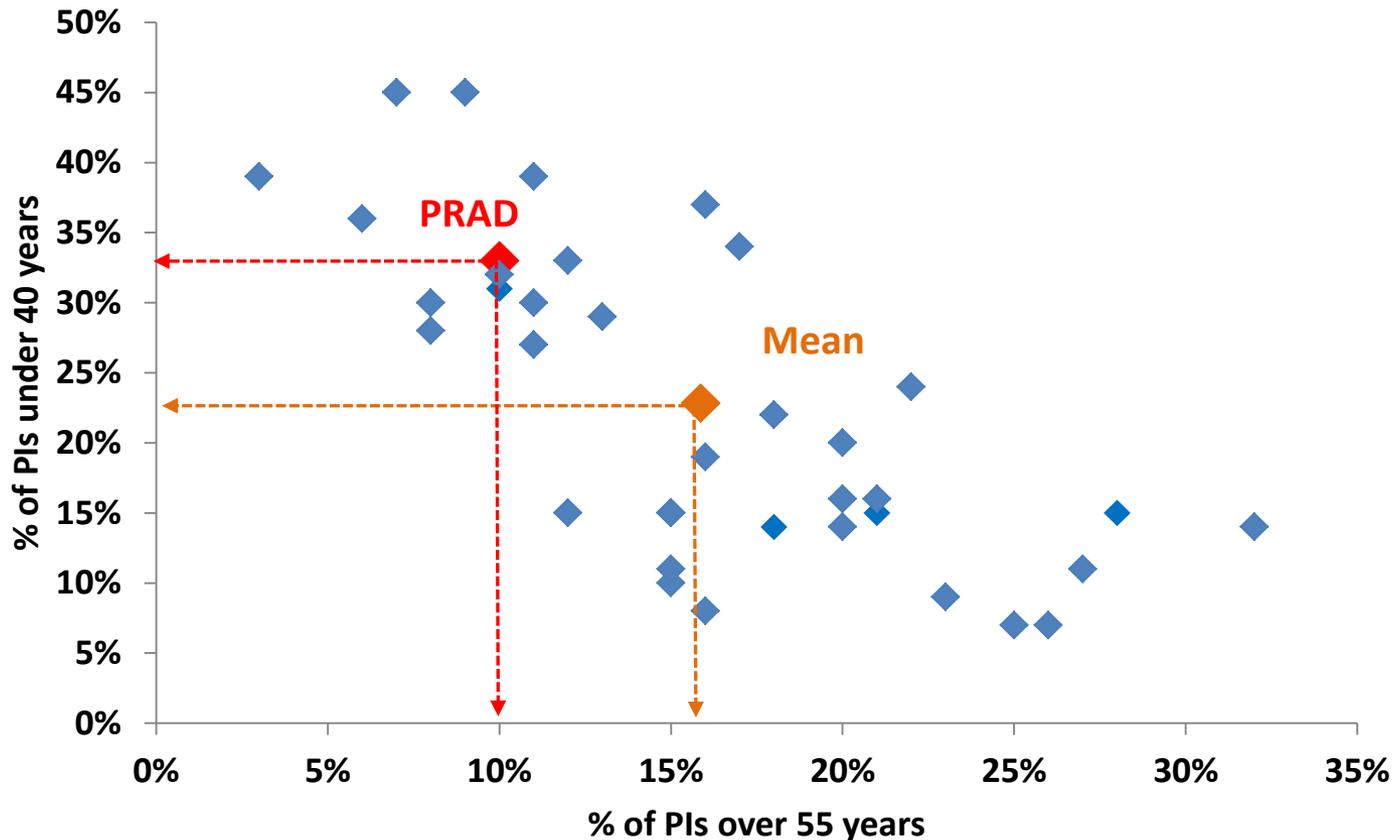
PI's employers



Laboratories authorities



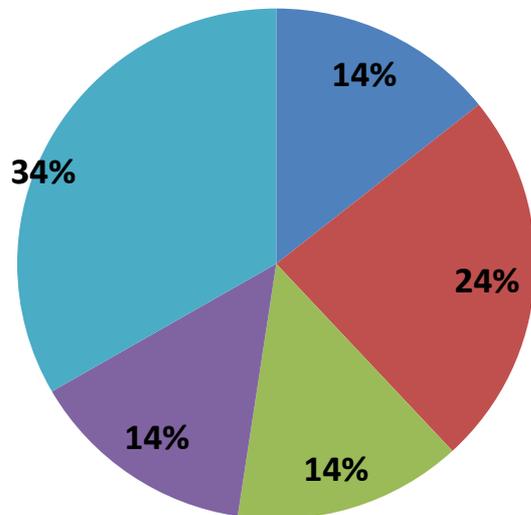
AGE OF PRINCIPAL INVESTIGATORS (PI) (COMPARISON BETWEEN 37 DIFFERENT BILATERAL PROGRAMMES)



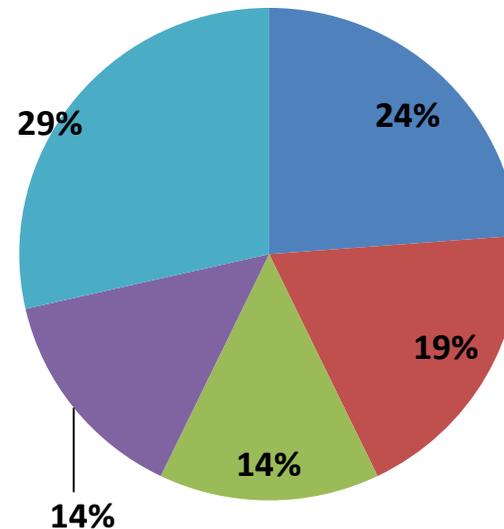
PIs under 40 years : 33% vs 23% mean
PIs over 55 years : 10% vs 16% mean
57% of the PIs are between 40 and 55 years

FRENCH PIS (PRINCIPAL INVESTIGATORS) : STATUS

**Previous professional status
(at the beginning of the project)**

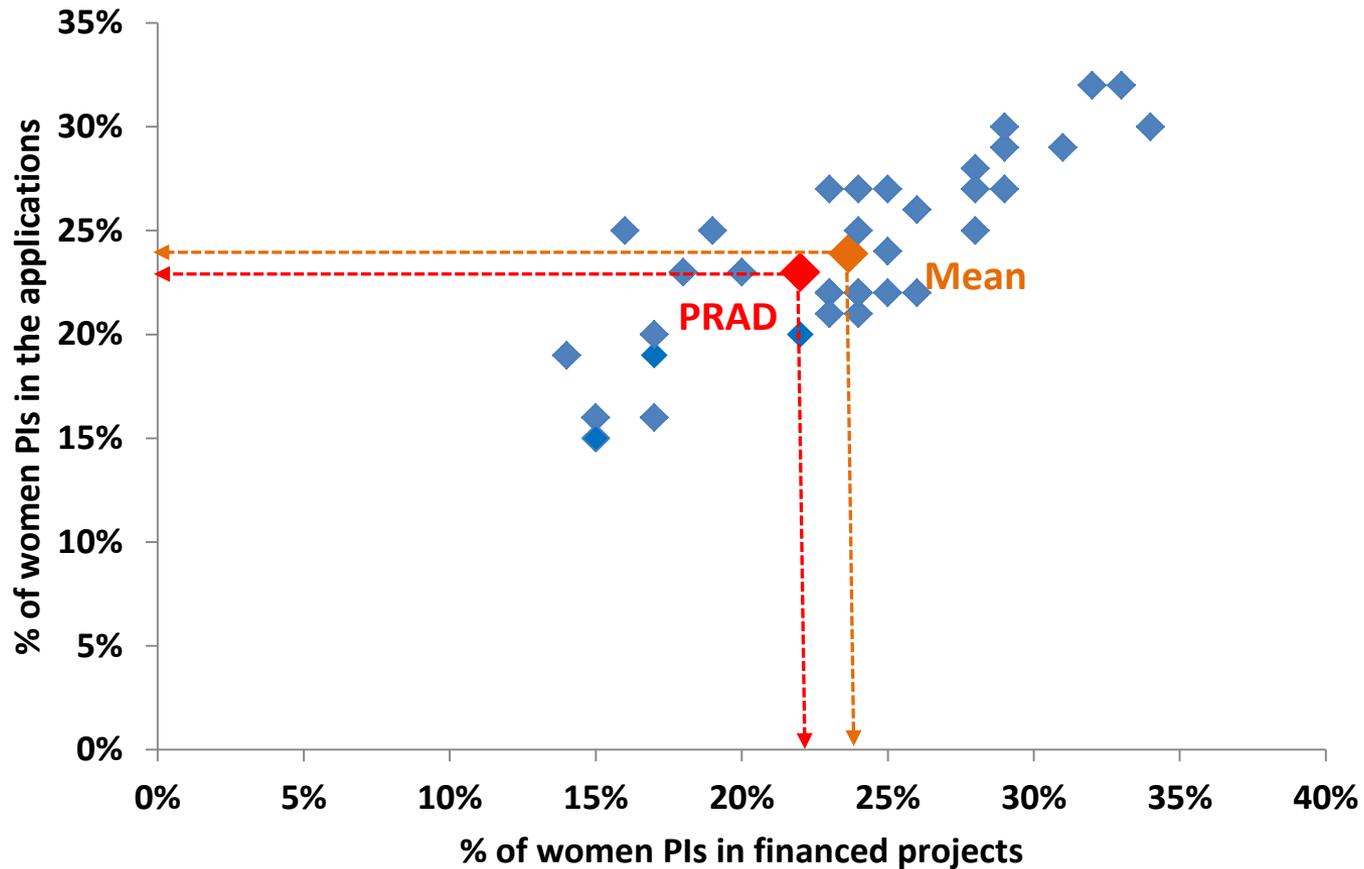


Current professional status



IMPLICATION OF WOMEN (FRANCE)

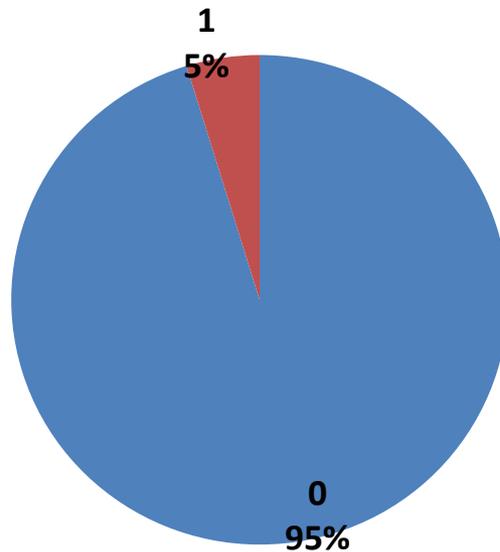
(COMPARISON BETWEEN 37 DIFFERENT BILATERAL PROGRAMS)



% of women PIs in the applications : 23% vs 24% mean
% of women PIs in the selected projects : 22% vs 24% mean

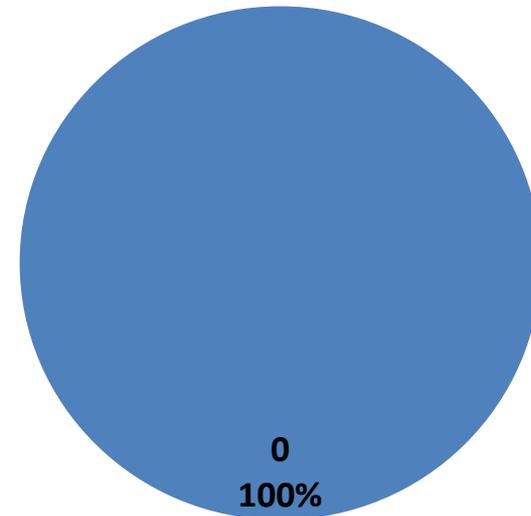
PARTICIPATION OF FRENCH YOUNG RESEARCHERS

Number of French PhD students



5% of projects involve at least one French PhD student

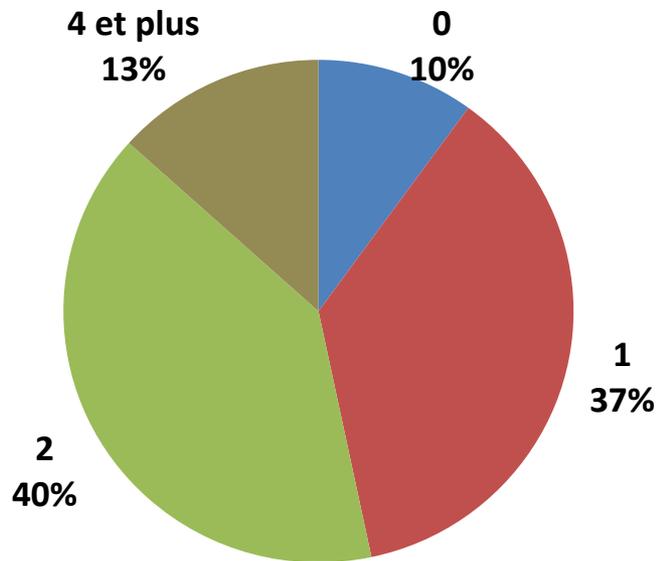
Number of French post-doctoral researchers



None of projects involve a French post-doctoral researcher

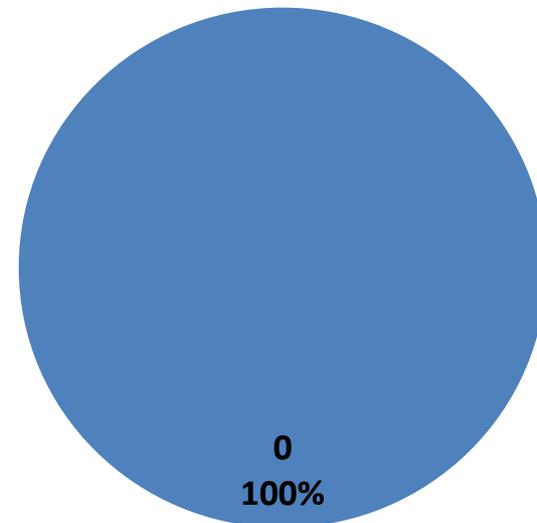
PARTICIPATION OF MOROCCAN YOUNG RESEARCHERS

Number of Moroccan PhD students



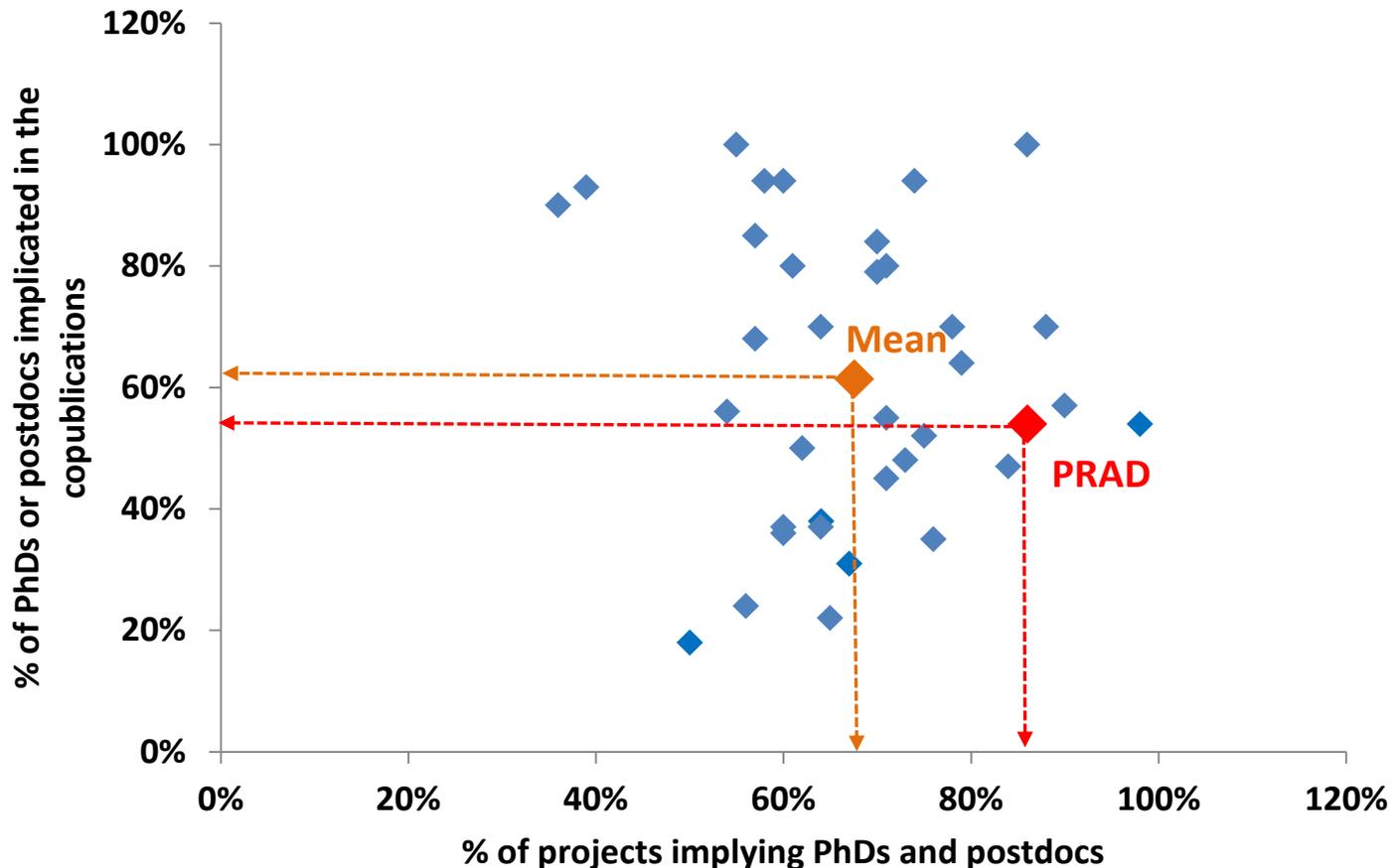
90 % of projects involve at least one Moroccan PhD student

Number of Moroccan post-doctoral researchers



None of projects involve a Moroccan post-doctoral researcher

IMPLICATION OF YOUNG RESEARCHERS (COMPARISON BETWEEN 37 DIFFERENT BILATERAL PROGRAMS)



% of projects implying young researchers : 100% vs 68% mean

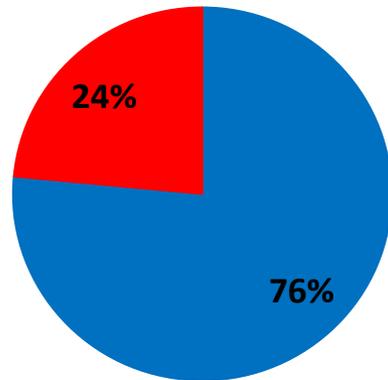
% of PhD or postdoc implicated in the copublications : 54% vs 61% mean



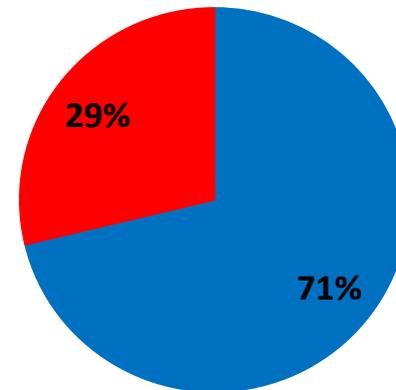
MOBILITY 2007-2014

MOBILITY : GENDER DISTRIBUTION

France → Morocco



Morocco → France

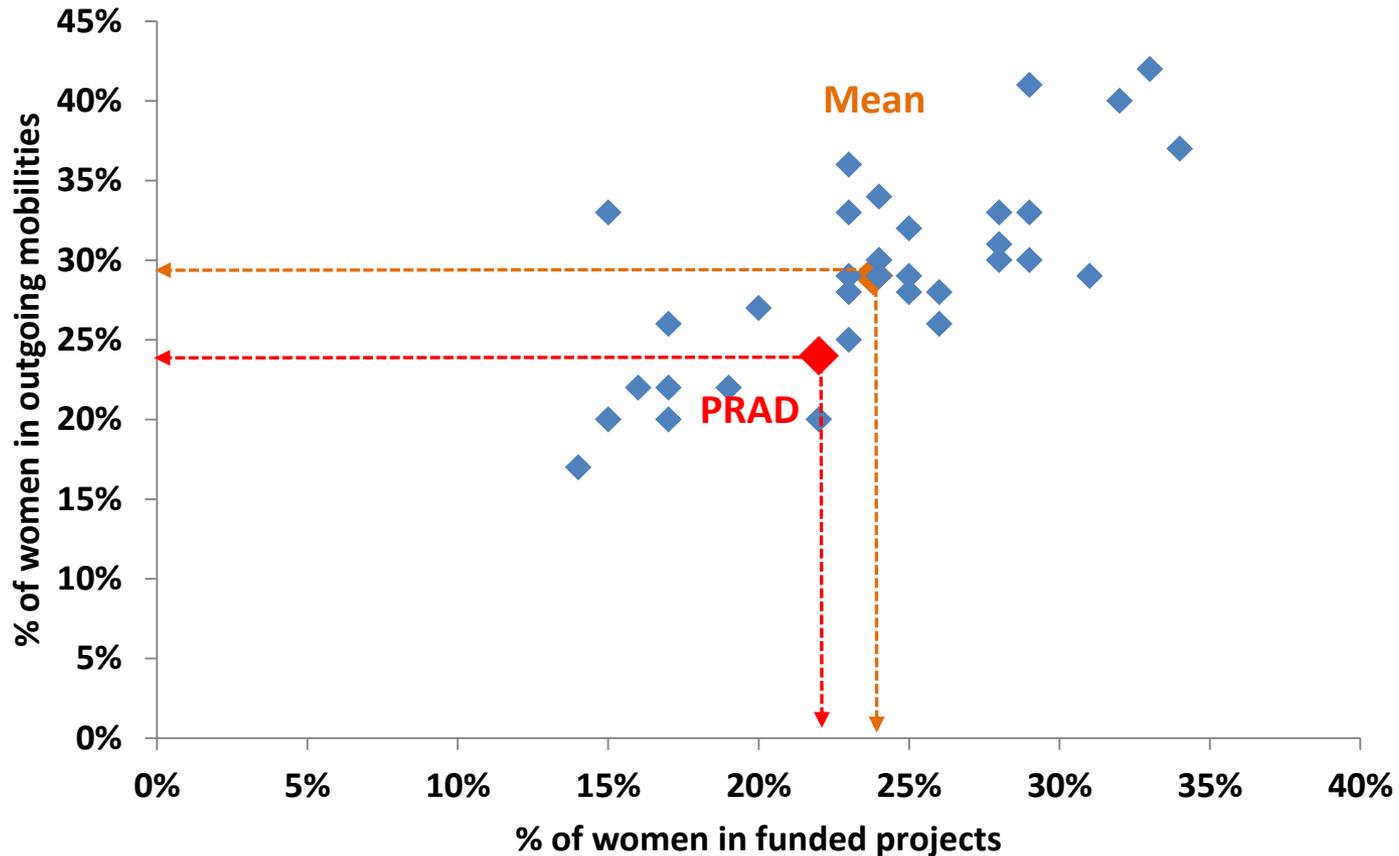


■ Men ■ Women

Data from 73 funded projects

WOMEN MOBILITY FRANCE – MOROCCO

(COMPARISON BETWEEN 37 DIFFERENT BILATERAL PROGRAMS)



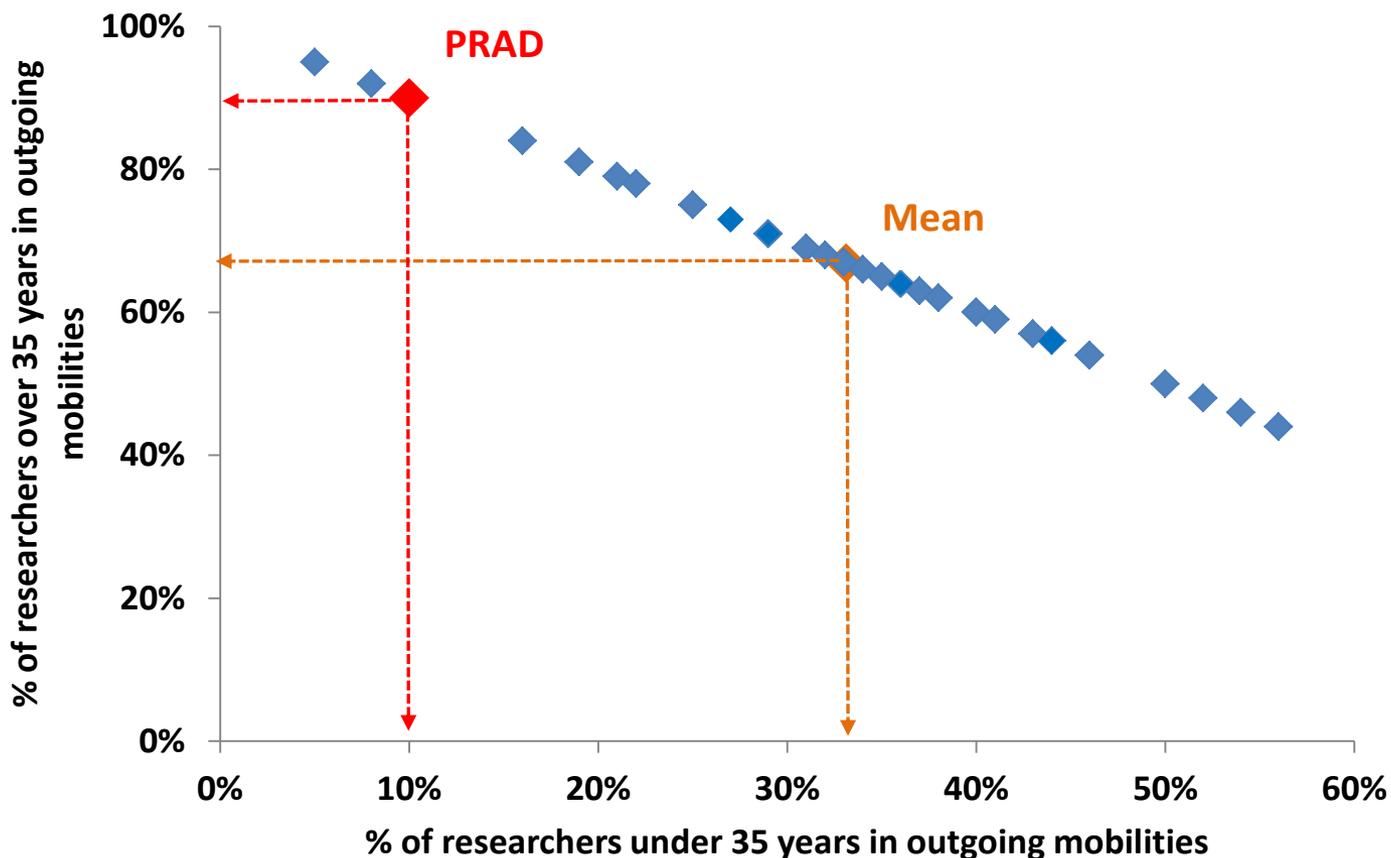
% of women researchers in the selected projects : 22% vs 24% mean

% of women researchers in outgoing mobilities : 24% vs 29% mean

FRENCH YOUNG RESEARCHERS' MOBILITY

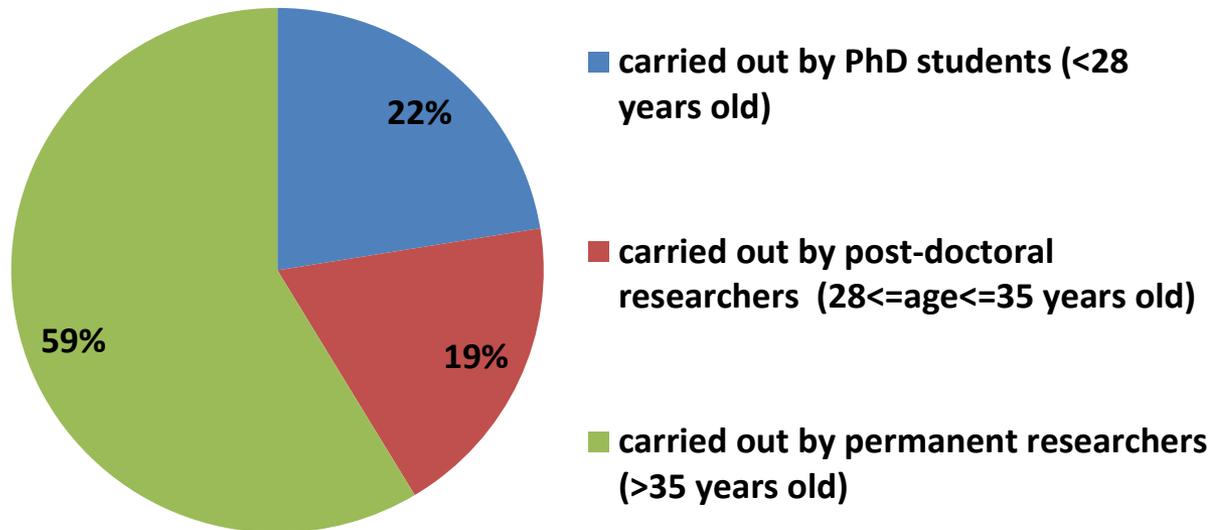
FRANCE – MOROCCO

(COMPARISON BETWEEN 37 DIFFERENT BILATERAL PROGRAMMES)



% of French young researchers in outgoing mobilities : 10% vs 33% mean

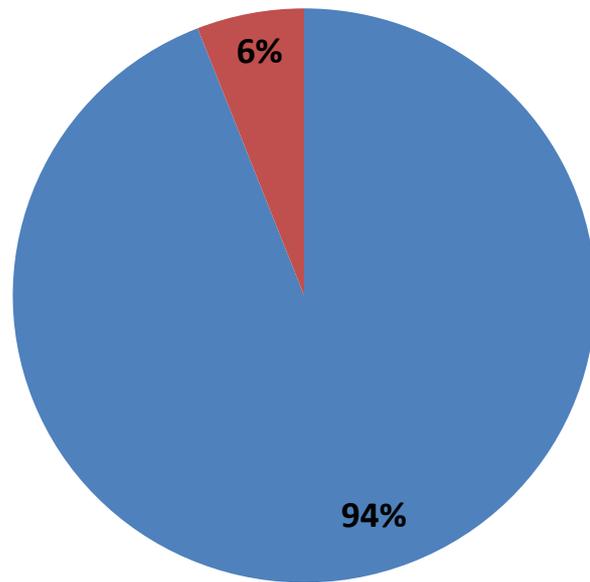
MOROCCAN RESEARCHERS' MOBILITY MOROCCO- FRANCE



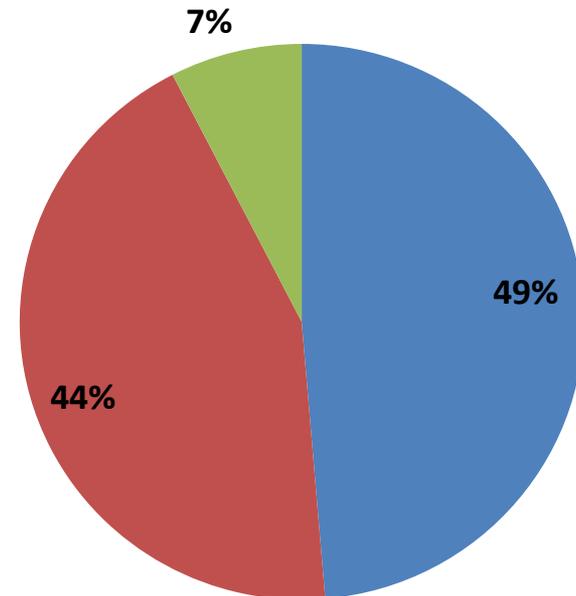
% of Moroccan young researchers in incoming mobilities : 41%

MOBILITY : DURATION

France → Morocco



Morocco → France



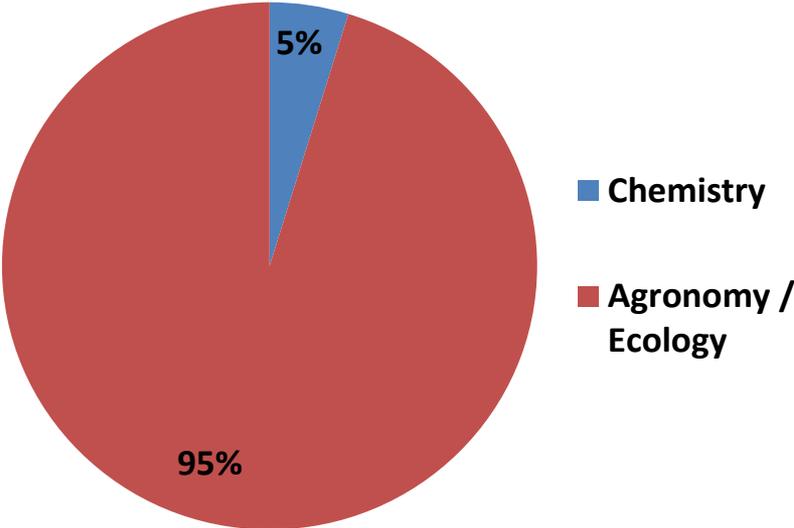
- < 15 days
- between 15 days and 3 months
- > 3 months



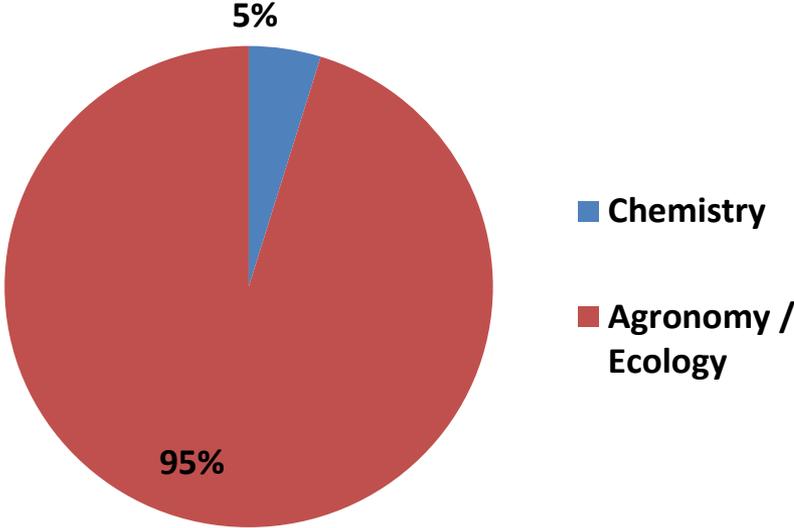
SCIENTIFIC PRODUCTION 2007-2014

SCIENTIFIC OUTPUT (1/2)

Funded projects with responses to the survey (21)



Percentage of copublications



SCIENTIFIC OUTPUT (2/2)

Data from 21 funded projects

	Number of financed projects in the survey	Average number of co-publications per project
Chemistry	1	7,00
Agronomy / Ecology	20	0,95
TOTAL	21	1,24

Overall average **annual** number of copublications per project : **0,41 vs 0,91 mean**

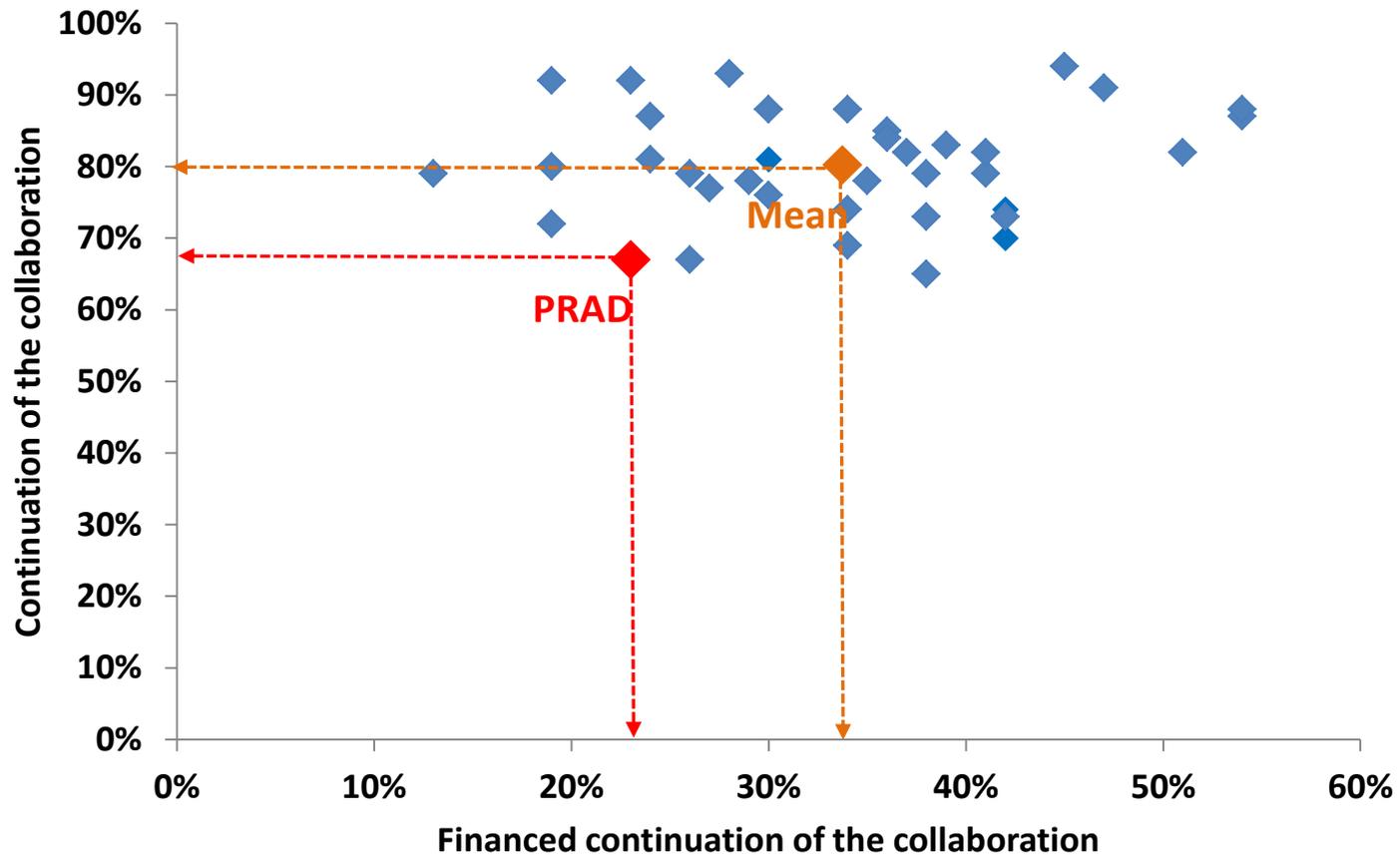
62% of funded projects led to one co-publication at least

62% of copublications include at least 1 PhD or PostDoc

The average annual rate of publication for young researchers involved in the projects is **0,19**

WHAT HAPPENS AFTER A PRAD PROJECT ?

CONTINUATION OF THE COLLABORATION (1/5) (COMPARISON BETWEEN 37 DIFFERENT BILATERAL PROGRAMS)



Continuation of the collaboration : 67% vs 80% mean

Continuation of the collaboration with other sources of subvention : 23% vs 34% mean

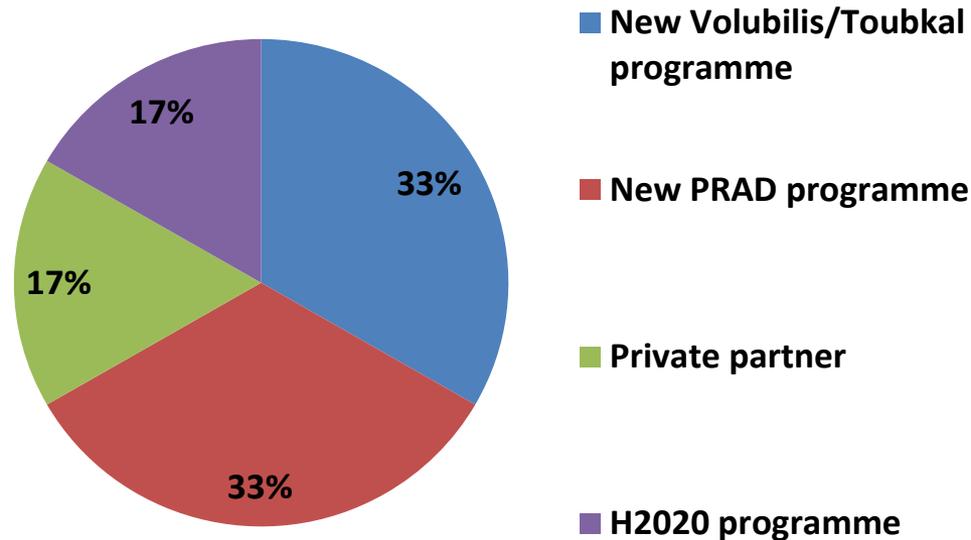
CONTINUATION OF THE COLLABORATION (2/5)

67% of the collaborations continued after the PRAD project

Which activities?	
Collaborative research	64%
Co-publications	43%
Co-organisation of scientific events	29%
Joint participation to conferences	29%
Researchers mobility	21%
PhD mobility	14%
Joint participation to PhD thesis	14%
Joint diplomas (Master, PhD...)	0%
Others	14%

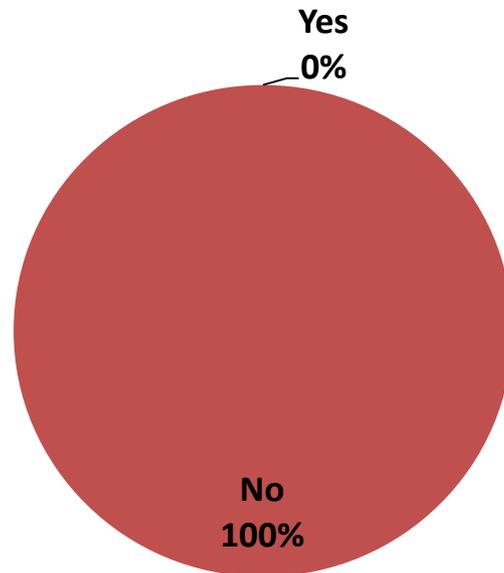
CONTINUATION OF THE COLLABORATION (3/5)

What kind of funded collaborations after the PRAD project ?



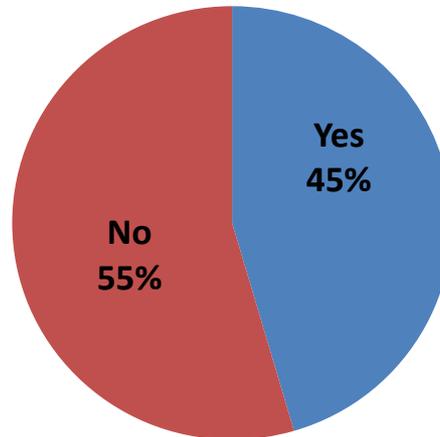
CONTINUATION OF THE COLLABORATION (4/5)

Has the PRAD project led to the set-up of joint structures?



CONTINUATION OF THE COLLABORATION (5/5)

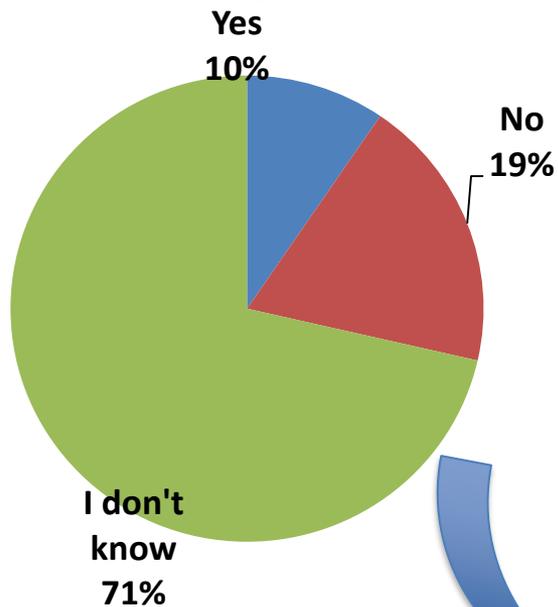
Has the France-Morocco collaboration involved new partners?



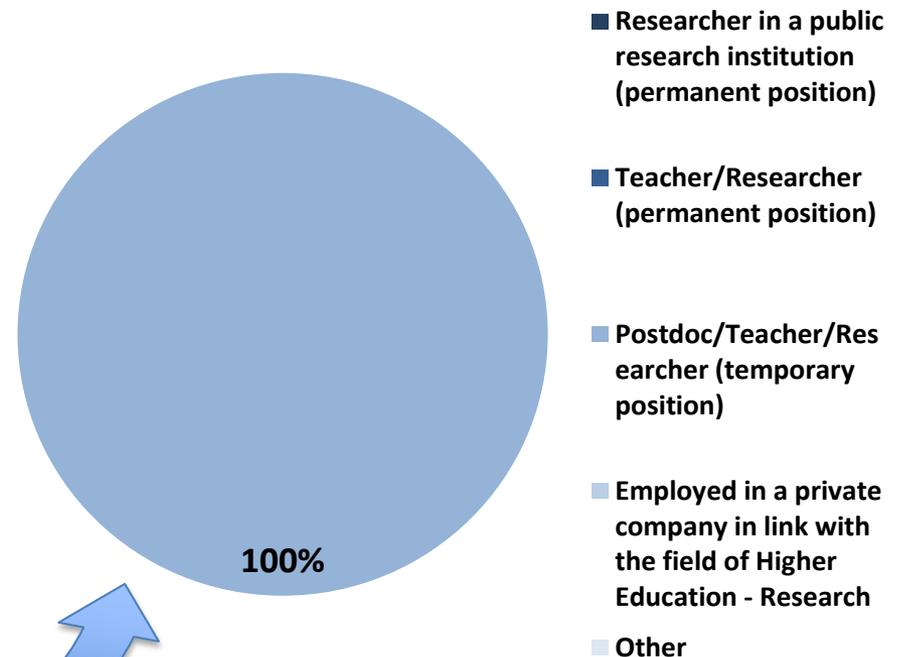
For a total of 6 new partners from 4 different countries

IMPACT ON FRENCH YOUNG RESEARCHERS' CAREER

Was french young researchers' career impacted by the PRAD program ?



Type of impacts

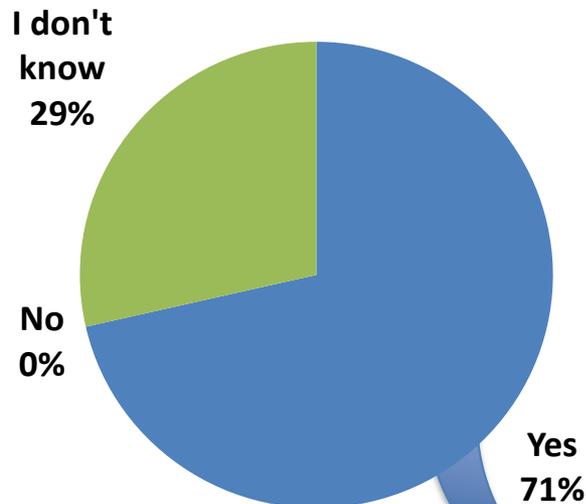


Data from 21 responses

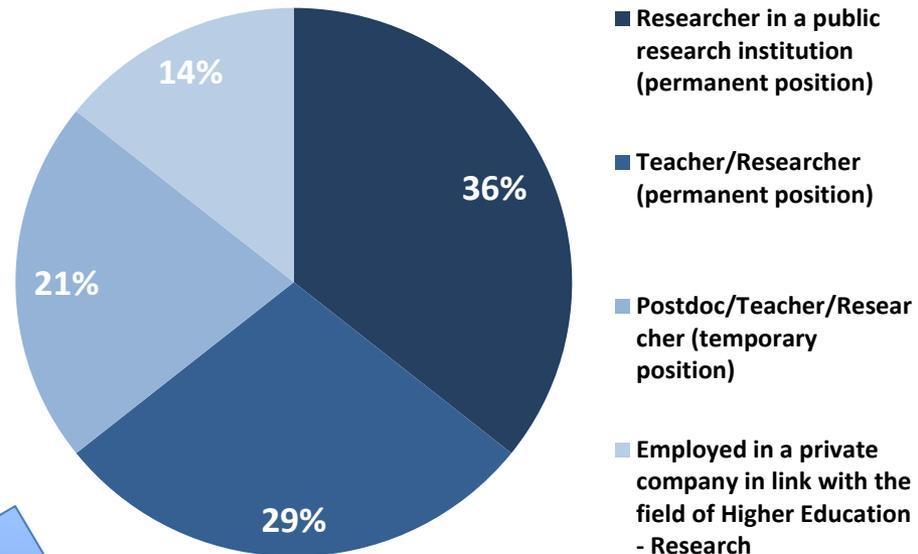
Data from 2 positive responses for a total of 2 french young researchers with a temporary position

IMPACT ON MOROCCAN YOUNG RESEARCHERS' CAREER (1/2)

Was moroccan young researchers' career impacted by the PRAD program ?



Type of impacts

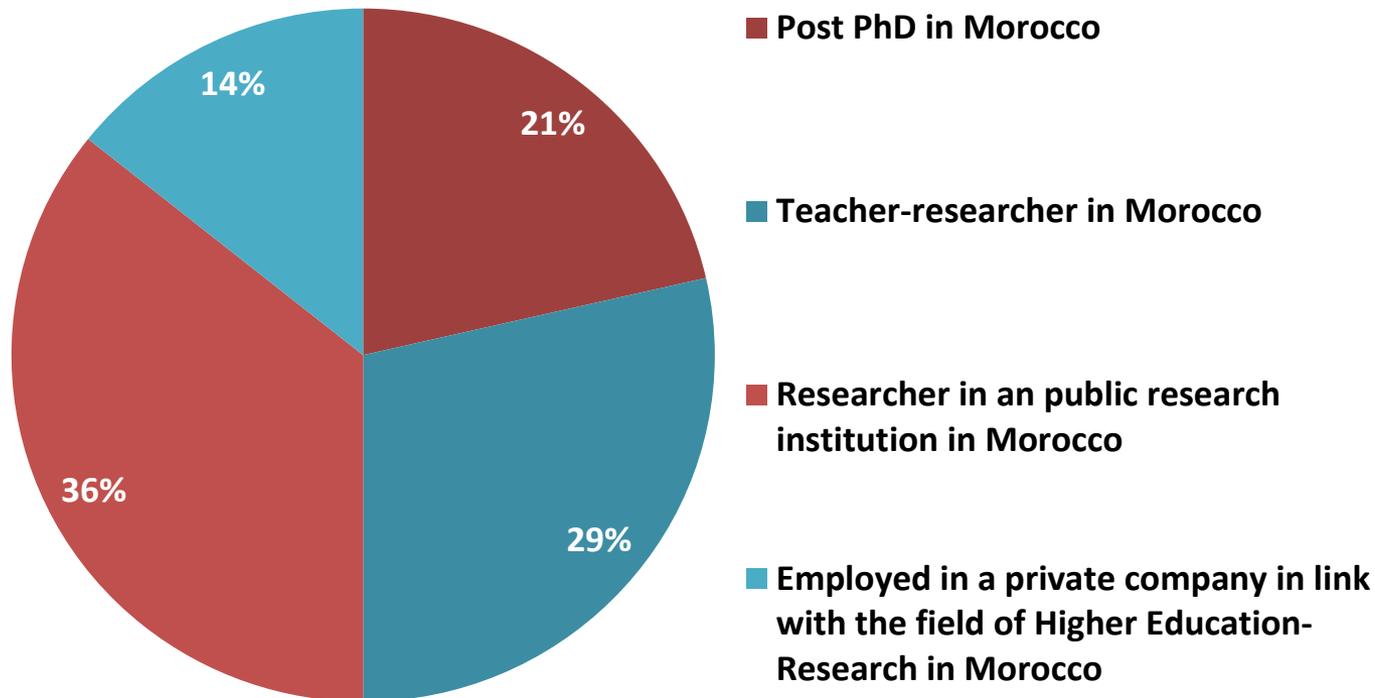


Data from 21 responses

Data from 15 positive responses for a total of 14 moroccan young researchers

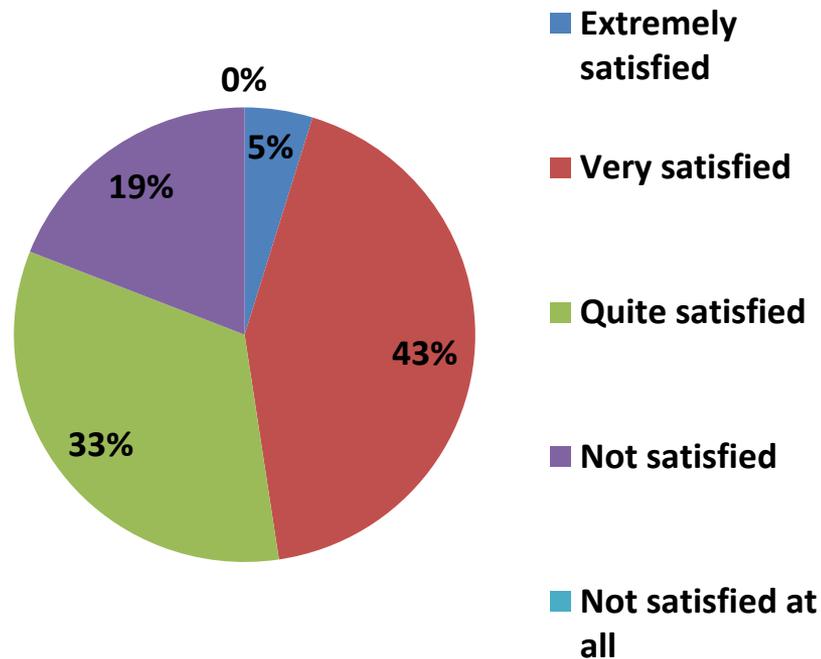
IMPACT ON MOROCCAN YOUNG RESEARCHERS' CAREER (2/2)

Detailed types of impacts



GENERAL OPINION OF FRENCH PIS ON THE PROGRAM

81% of French principal investigators are satisfied



Data from 21 responses

GENERAL OPINION OF FRENCH PIS ON THE PROGRAM (2/3) POSITIVE COMMENTS

SURVEY OF 21 FUNDED PROJECTS



Strengths of this program	Number of occurrences (out of 94)	% (out of 21)
Allows the training of the young researchers	16	76%
Allows the mobility of the researchers	11	52%
Allows a knowledge of the country partner	11	52%
Simplicity of the application process	10	48%
Allows an international scientific collaboration	10	48%
Financial means sufficient for the expenditure of mobility	7	33%
Easy implementation (administrative flexibility)	7	33%
Allows exchanges which allow a scientific production	6	29%
Sufficiently long duration of the projects	4	19%
Good scientific appreciation compared to the financial investment	3	14%
Is used as starting for raising other funds	3	14%
Duration of mobilities adapted to the needs	3	14%
Financial autonomy towards your institution	1	5%
Timetable for implementation	1	5%
Transparency of the methods for selecting the projects	0	0%
No strenght point	0	0%
Others	1	5%
Total number of occurrences	94	

GENERAL OPINION OF FRENCH PIS ON THE PROGRAM (3/3) NEGATIVE COMMENTS

SURVEY OF 21 FUNDED PROJECTS



Weaknesses of this program	Number of occurrences (out of 49)	% (out of 21)
No funding of the operation and capital expenditures	12	57%
Difficult perpetuation of collaboration	7	33%
Too short duration of the projects	5	24%
Heaviness of the process of applications	4	19%
Lack of transparency on the methods of projects selection	4	19%
Administrative heaviness of the missions management	4	19%
Financial means insufficient for the expenditure of mobility (transport)	3	14%
Financial means insufficient for the expenditure of mobility (per diem)	3	14%
No weakness	1	5%
Too short duration of mobilities	1	5%
Insufficient communication on the evaluation's results	1	5%
Too low number of mobilities	1	5%
Financial autonomy towards your institution	1	5%
Timetable for implementation	0	0%
Flexibility of the programme for actions co-financed with the partner	0	0%
	0	0%
Other	2	10%
Number of occurrences	49	

PRELIMINARY CONCLUSIONS

Preliminary conclusions suggest that the funding scheme has efficiently contributed to create (or to maintain) fruitful and long-term cooperation in Agronomy, despite the relatively low financial support.

 A successful program with a constant number of applications each year.

33% of PIs were under 40 years old versus 23% for the general mean.

86% of the projects involve at least one Moroccan young researcher.

71% of young moroccan researchers were positively impacted by the program

 **PRAD program initiated only 48% of new collaborations. Reconducted collaborations were for 73% of them with the same partner.**

Too weak implication of women PIs in the applications and the mobilities

Too weak implication of young researchers in the co-publications.

Insufficient annual number of copublications per project (0,41 vs 0,91)

Professional insertion of moroccan PhDs only in Morocco

PRELIMINARY RECOMMENDATIONS

The PRAD program ended in 2014 and has not been reconducted since then.

The objective was to strengthen cooperation research in Agronomy

The high specialization of this program led to relatively few applications and consequently relatively few selections

In 2015, this program was merged with the PHC Volubilis to create the PHC Toubkal.

French national ministries (MESRI / MEAE) will provide a complete analysis of the survey. It will be sent to the recipients of the funding and participants in this symposium.

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Thank you for your attention