

AGRO department meeting

11 and 12 September 2018

Erik Steen Kristensen

Agenda:

1. Status on research based advice to the Ministry of Environment and Food
- addendum projects/Finn Plauborg
2. Economy in 2018
3. Project and economy management in 2019
4. Meetings for juniorVIP and seniorVIP
5. Conclusion



New possibilities/threats for AGRO in recent years

- 22 Dec 2015 Food and agriculture package
 -Targeted regulation
 -No reduction in the N norm
 -Addendum tasks 1, 2 and 3

- 28 Jun 2017 Competitive tender of MFVM's research based advice to the Ministry
 Over a 10-year period towards 2026

Vigtige forskningsområder hvor vi skal have et kvalificeret beredskab.

- A. N-normer, N-respons på udbytter sfa. stigende mængder N (Normudvalg).
- B. Udvaskning ad N fra dyrkningsfladen (N-less).
- C. Reduktion af nitrat fra dyrkningsfladen og frem til fjord og hav (N-retentionskort, addendum opg 1-2).
- D. Virkemidler udenfor dyrkningsfladen (MMM).
- E. Tab af P og regulering af P.
- F. Reduktion af klimagasser, regulering og tilpasning til klimaforandringer.
- G. Karantæneskadegørere og regulering af disse .
- H. Frø og plantegenetiske ressourcer.
- I. Resistens mod pesticider og regulering af pesticider.
- J. Logistik forsøgs- og lab-kapacitet til at håndtere vand/jord/planteprøver fra forskellige geo-regioner i hele Danmark (som i Pesticid-overvågningen (VAP)).
- K. Fælles databaser og modelplatforme, alle bidrager med deres data samt at vi undgår flaskehalse og forsinkelser.

AGRO's udgifter i 2017 og 2018 til Rådgivning og Forskning i Ydelsesaftale Planteproduktion mio. kr.

Indsatsområde	Ramme Fra MFVM	Rådgivnings- projekter		Forsknings- projekter og medfinansiering		Eksterne indtægter fra forsknings- projekter og kontrakter	
1. Planternes forædling og bestøvning, plantesundhedsaspekter samt plantebeskyttelse og Integrated Pest Management (IPM)	30.5	5.2	5.8	7.2	8.4	43.7	41.9
2. Klima-smarte produktionssystemer	9.9	2.5	2.7	4.1	3.9	8.4	10.1
3. Gødningsstoffer, normtal og kvælstofprognose	9.9	4.1	5.6	1.6	1.1	2.0	1.0
4. Teknologi - jordbrug og planteavl	14.9	0.1	0.1	~	0.1	0.5	0.6
5. Jord og jordbundsforhold, herunder digitale data, kort og billedanalyse	16.9	3.4	5.5	3.9	3.1	7.5	8.7
6. Grøn omstilling og biomasse	19.9	1.2	1.7	1.8	4.6	2.0	5.0
7. Måltrettet arealregulering og virkemidler	23.0	7.0	11.8	6.3	8.7	14.8	16.5
8. Landbrugsreform og offentlige grønne goder	8.0	0.3	0.2	0	~	0.4	0.2
I alt*	133.0	23.8	33.8	24.9	29.9	79.3	85.8
Heraf indirekte omkostninger*		59.0	57.4				

Addendum 1-2 projects 2016-19

The Food and Agriculture Package December 2015 instructed AGRO to use 6 million DKK per year within the areas 1) Drainage flow measurements for acquiring knowledge about effective location of environmental measures e.g. mini-wetlands 2) Research on nitrogen turnover and transport in agricultural landscapes where these processes are difficult to quantify, e.g. lowlands.

At the April 2018 meeting, the Ministry expressed great satisfaction with the progress of the six sub-projects presented, but also the expectation that we will be on target in 2019.

Many AGRO people collaborate in these projects, including project managers Christen Duus Børgesen, Poul Erik Lærke, Bo Vangsø Iversen, Finn Plauborg, Birger F. Pedersen and Mogens H. Greve. Furthermore, Preben Olsen, Mette Balslev Greve, Rene Larsen, Chris Kjeldsen, Lorenzo Pugliese, Nick Hutchings, Ying Wang, Yi Peng, Amélie Beucher, Henrik Nørgaard, Jørgen M. Nielsen, Morten Skov, Bodil Stensgaard, Anette Kromann, Jørgen M. Nielsen, Michael Koppelgaard, Stig T. Rasmussen, Eva O. Bach, Margit S. Jørgensen, and Carl Christian Hoffmann (BIOS), as well as PhD students: David Nagy, Anders B. Møller, Saghar K. Motarjemi, Rasmus Jes Petersen, Kim Schwartz Madsen, Kari Anna Wolf, Ioannis Varvaris, Christian Prinds, Maria Isabel Senal, Lipe R. D. Mendes, Triven Koganti, Gasper L. Sechu, and Merek Kesser.

Important internal workshop 11-12 October 2018, Mols Laboratory: How do we achieve the goals, including synergy between the Addendum 1-2 projects and the Addendum 3 project Constructed Wetland with Matrix of Wood Chips (MMM)



Addendum 3 project MMM 2017-20

The MMM project Constructed Wetland with Wood Chips has a total budget of 31 million DKK, including 15 million DKK from the Ministry of Environment and Food and 4 million DKK from the Future Cropping, iDræn and Buffertech projects.

AGRO has undertaken to establish two full-scale facilities and four pilot plants, research in design and improved N reduction efficiency, negative side effects and long-term studies of the efficiency of existing plants as well as modelling of water and nutrient transport in drainage catchments behind the established full-scale facilities.

The Ministry expressed its satisfaction at the meeting in August 2018 with the progress of the MMM project as all facilities are in operation at the coming run-off season and research in negative side effects and long-term studies are progressing as planned.

Finn Plauborg is project manager and many AGRO and BIOS people work on the project, including Dennis Villadsen, Maja H. Skjødt, Margit S. Jørgensen, Preben Olsen, Bo V. Iversen, Christen D. Børgesen, Lorenzo Pugliese, Henrik Nørgaard, and Carl Christian Hoffmann (BIOS) et al.

Cooperation with Novozymes has been established and a joint PhD. position will be posted at AGRO in September. The project has obtained 1/3 funding from WATEC.

As a new procedure, sampling will be carried out by people from Flakkebjerg, including Thomas B. Jensen and others, and people from Askov, including Henning C. Thomsen and others.

WATEC adds to the Add. projects

AU's new water technology centre WATEC (www.watec.au.dk) has associated many researchers from AGRO and the Centre contributes significantly to the addendum projects, including:

AGRO's obligations under the addendum projects are partly written into WATEC's strategy: "New organization for integrated mapping, modelling and uncertainty estimation in surface and subsurface soil structures, water flow and transport of chemicals"

AGRO has obtained three 1/3 PhD scholarships from WATEC:

- Saghar K. Motarjemi (main supervisor Finn Plauborg)
- Kim S. Madsen (main supervisor Christian D. Børgesen)
- NN collaboration with Novozymes (main supervisor Lars Elsgaard)

WATEC has awarded DKK 300.000 for a cooperation project between AGRO, GeoScience and BIOS on modelling of water transport in Javngyde ID15 sub-catchment to lake Ravn.

More funds from WATEC will be made available in 2019 for small collaborative projects between the Centre's institutes.

Agenda

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2. Economy in 2018
3. Project and økonomistyring i 2019
4. Meetings for JuniorVIP and seniorVIP
5. Conclusion

Decision made at department management meeting on 23 March

Immediate need for prioritizing of projects for the ministry and better utilization of existing staff.

Therefore:

1. Temporary/qualified hiring freeze on all appointments
2. Temporary/qualified freeze on all transfers from 2018 to 2019 and in the future on externally financed projects
3. Going through of all projects for the ministry with a view to preparing a proposal for prioritizing these in cooperation with DCA and MFVM

What is the end result?

AGRO's economy in 2017 and budget for 2018 mill. kr./year

	Økonomi 2017	Budget 2018 ØR1 april 18	Budget 2018 ØR3 2018
Indtægter			
Myndighedsrådgivning, MFVM	57,7	55,3	55,3
Basismidler, AU	5,4	12,1	12,1
Særbevillinger (ph d mm.)	10,1	13,9	15,4
Eksterne projekter	120,7	128,5	128,9
<i>I alt</i>	<i>194,1</i>	<i>209,8</i>	<i>211,7</i>
Udgifter			
Interne bidrag	39,6	38,6	38,7
Lønninger	120,1	127,1	4 mill. kr. 131,2
Driftsomkostninger (E+I)	34,4	40,0	8 mill. kr. 48,0
Afskrivninger	3,2	3,0	3,0
<i>I alt</i>	<i>197,2</i>	<i>208,8</i>	<i>221,5</i>
Resultat	-3,1	1,0	-9,8

Growth in salary costs

Growth in operating costs

person year employed in AGRO

	Real 2017	ØR1 april 2018	ØR3 sep 2018
SeniorVIP	52,9	53,4	53,5
Nuværende stillinger		50,8	53,0
Nye stillinger		2,6	0,5
VIP-øvrige	39,2	32,7	34,0
Nuværende stillinger		30,0	33,1
Nye stillinger		2,7	0,9
PhD	45,3	49,7	54,1
Nuværende stillinger		47,7	52,9
Nye stillinger		2,0	1,2
TAP	111,0	113,3	118,2
Nuværende stillinger		111,8	117,9
Nye stillinger		1,5	0,3
Årsværk i alt	248,4	249,1	259,8
Nye stillinger i alt		8,8	2,9

Ca. 10 Phd/TAP man years didn't figure in ØR1

Splitting up operating costs AGRO's economy in 2017 and budget for 2018 mill. kr./year

	Økonomi 2017	Budget 2018 ØR1 april 18	Budget 2018 ØR3 2018
Indtægter			
Myndighedsrådgivning, MFVM	57,7	55,3	55,3
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Udgifter			
Interne bidrag	39,6	38,6	38,7
Lønninger	120,1	127,1	131,2
Driftsomkos	28,0	32,0	33,0
Afskrivninge	6,4	8,0	15,0
<i>I alt</i>			
Resultat	-3,1	1,0	-9,8

7 mill. operating costs in M were missing in ØR1

Growth in operating costs



SUB-CONCLUSION

In 2018, AGRO has made many investments in PhDs and establishment/operation of advice to the Ministry

Therefore, there is a need for better and earlier control of staffing and budgets

Budget for governmental advice projects in 2019 (mill. kr.)

Advice projects	27
Supporting research	23
Down payment/unforeseen costs	5
Total	55

INTERNAL APPLICATIONS 2018

Forslag om internt myndighedsprojekt i AGRO 2018

PROJEKTLEDER:

TITTEL:

MHB-indsatsområde Rådgivningsopgaver Understøttende forskning

Start år Slut år

Beskrivelse:

Startdato:

Evt. tilknyttet ph.d.-studerende (navn):

FORVENTET UDBYTTI:

AGROKLOGI

Budget

År	2018	2019	2020	2021	2022
Månedsværk					
VIP					
TAP					
PhD					
Drift					
Øvrigt drift*					
Anskaffelser					
Tuition fee					
Total					

Specifikation af forventet tidsforbrug, måneder

Navn	2018	2019	2020	2021	2022

Bemærkninger til budget:

*Øvrigt drift skal indeholde budget til it-inkøb, konferencer, rejser, analyser, o.l.

Applied internal funds 2018 for governmental support (mill. kr.)

I alt 62 ansøgninger

Indsatsområde	Løn	Drift	Anskaffelser	Total for indsatsområdet
1. Planters forædling og bestøvning, plantesundhedsaspekter samt plantebeskyttelse og IPM	5,1	1,0	0,5	6,6
2. Klima-smarte produktionssystemer	3,6	1,1	0,2	4,9
3. Gødningsstoffer, normtal og kvælstofprognose	9,0	1,7	1,0	11,7
4. Teknologi – jordbrug og planteavl				0
5. Jord og jordbundsforhold, herunder digitale data, kort og billedanalyse	3,3	0,8	0,2	4,2
6. Grøn omstilling og biomasse	1,2	0,1		1,3
7. Målrettet arealregulering og virkemidler	6,2	5,3	1,4	12,9
8. Landbrugsreform og offentlige grønne goder				0
Total	28,3	9,9	3,4	41,5

2019

Oversigt over indmeldte Rådgivningsprojekter (R)

Sektion	Projektleder	Titel	I ndsats- område
CROP	Birte Boelt	Plantegenetiske ressourcer, sameksistens, GMO afgrøder	1
CROP	Lise Nistrup Jørgensen	Monitering for resistance to Zymoseptoria tritici and developing control strategies which can minimise selection pressure for new resistance	1
PATENT	Mogens Nicolaisen	Trusselsbilleder og beredskabsplaner ved skadegørerdudbrud	1
PATENT	Per Kryger	Organisering og drift af den offentlige bekæmpelse og overvågning af bysygdomme	1
PATENT	Per Kryger	Faste opgaver vedr. honningbier o.a. bestøvere, der ligger ud over den Offentlige bisygdomsbekæmpelse	1
PATENT	Mette Vestergård	Nematoder	1
JORD	Goswin Heckrath	Evaluering erosionsmodel	5
JORD	Mogens Greve	WP6-Forbedret kortgrundlag	3
JORD	Preben Olsen	WP3-VAP - teknologisk opdatering og renovering til sikring af den fortsatte drift	5
JORD	Preben Olsen	WP3-Effektivisering af og opdatering ved indsamling og håndtering af drænvandsprøver i AGRO	3
JORD	Bo Vangsgø Iversen	Monitering af konstruerede minivådområder	7
JORD	Lis W. de Jonge	Sampling og jordfysisk-kemisk karakterisering af jorde fra LOOP områderne	5
JORNÆR	Bent T. Christensen	De langvarige gødningsforsøg, Askov-LTE	3
JORNÆR	Elly M. Hansen	Dyrkningssystemer med pløjefri dyrkning	2
JORNÆR	Elly M. Hansen	Nye efterafgrøder	7
JORNÆR	Gitte Rubæk	Effekter af dyrkningspraksis på omsætning, udnyttelse og nedvaskning af fosfor i landbrugsjord	7
JORNÆR	Ingrid K. Thomsen	O-marken - Efterafgrøder og halmnedmulding	3
JORNÆR	Lars Elsgaard	Nitrous oxide emission factors for oilseed rape for biodiesel	2
JORNÆR	Peter Sørensen	Placeret gylle som fosfor startgødning til majs	3

Fortsættes...

2019

Oversigt over indmeldte rådgivningsprojekter (R)

...Fortsat

Sektion	Projektleder	Titel	I ndsats- område
JORNÆR	Peter Sørensen	Placeret gylle som fosfor startgødning til majs	3
JORNÆR	Peter Sørensen	Eftervirkning af organisk N i husdyrgødning og planterester på N-udvaskning og afgrøde N-optag	3
JORNÆR	Søren O. Petersen	Evaluering af nitrifikationshæmmeres effekt på N-udvaskning og lattergasemission	2
JORNÆR	Ingrid K. Thomsen	Fastsættelse af økonomisk optimale kvælstofnormer: Faglige udeståender og løsningsforslag	3
KLIMA	Christen Duus Børgesen	WP1-Metoder til forbedret kortlægning af dræen	3
KLIMA	Finn Plauborg	Minivådområder (MMM)	7
KLIMA	Finn Plauborg	WP4-Drænede højbundsjorde, herunder flere drænstationer og kortlægning af dårligt afvandede jorde	3
KLIMA	Poul Erik Lærke	Paludikultur	2
KLIMA	Poul Erik Lærke	WP2-Lavbund og vådområder	3
KLIMA	Uffe Jørgensen	Forskningsplatform for biomasseproduktion	6
KLIMA	Uffe Jørgensen	Biovalue optimeret biomasseproduktion	6
SYSTEM	Birger F. Pedersen	WP5-Databaser til målrettet regulering	3

I alt ca. 26 mio. kr.

2019

Oversigt over Understøttende Myndighedsforskning (UM)

Sektion	Projektleder	Titel	Indsats-område
CROP	Peter Kryger Jensen	Integreret bekæmpelse af agerrævehale	1
CROP	Per Kudsk	Væselhale	1
PATENT	Michael H. Kristensen	Skadedyr: Regulering af skadevoldende insekter i henhold til biocid-direktivet	1
JORD	Goswin Heckrath	Risikokort	5
JORD	Lis W. de Jonge	Miljømillion: Monitoring of Agricultural Resources	7
JORNÆR	Bent T. Christensen	13C-majs	2
JORNÆR	Gitte Rubæk	Udpining og vedligeholdelse af jordens fosforstatus - lysimeterforsøg ved Askov	3
JORNÆR	Gitte Rubæk	Vekselvirkning mellem Kalk og superfosfat. Det langvarige forsøg ved St. Jyndeved	7
JORNÆR	Iris Vogeler	Kvælstofmodellering	7
JORNÆR	Søren O. Petersen	Øget kapacitet til måling af drivhusgasser, overdækning af gyllelagre som virkemiddel til metanreduktion	2
KLIMA	Mette B. Greve	GIS-udvalg	5
KLIMA	Mette B. Greve	GIS-administration	5
KLIMA	Kirsten Kørup Sørensen	Klimadata og databaser	2

I alt ca. 6 mio. kr.

Dvs. ca. 17 mio. kr. til medfinansiering

Overview of income and co-financing for the sections in AGRO

	2018		2019		2020	
	Indtægt i alt	Medfinans	Indtægt i alt	Medfinans	Indtægt i alt	Medfinans

Kendte Indtægter og indtægtsdækket virksomhed

CROP	46.311.858	1.998.518	34.039.539	1.404.029	27.980.288	0
PATENT	15.624.242	1.151.190	12.835.295	585.576	5.595.714	0
JORD	18.029.018	2.606.987	9.394.364	1.572.128	2.204.672	0
JORNÆR	14.075.827	2.787.853	6.674.347	2.104.051	3.211.820	0
KLIMA	18.657.075	3.760.185	14.647.467	3.722.388	7.277.074	0
SYSTEM	15.247.815	900.517	14.040.967	874.170	3.743.430	0
MARK	2.092.325	0	2.528.325	0	2.163.325	0
STAB/forventet TF, IV ect.	-1.626.498	-59.000	4.371.278	-900.000	647.400	0
I alt kendte indtægter	128.411.662	13.146.250	98.531.582	9.362.342	52.823.723	0

Interne bevillinger, GSST midler og brugerbetaling fra andre institutter

CROP	647.278	5.562.333	440.000	3.749.466	0	0
PATENT	0	7.662.166	0	5.900.046	0	0
JORD	0	11.360.866	0	3.733.912	0	0
JORNÆR	355.588	11.076.969	0	7.228.169	0	0
KLIMA	3.179.500	10.664.094	3.435.000	4.987.540	3.000.000	0
SYSTEM	0	1.837.716	0	2.883.831	0	0
MARK	0	4.047.515	0	3.955.187	0	0
STAB	79.814.861	23.695.465	74.828.929	23.935.089	75.453.598	0
I alt	83.997.227	75.907.124	78.703.929	56.373.240	78.453.598	0

How can we provide more scope for action?

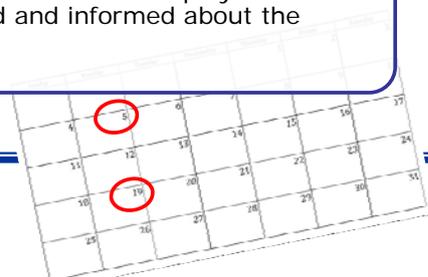
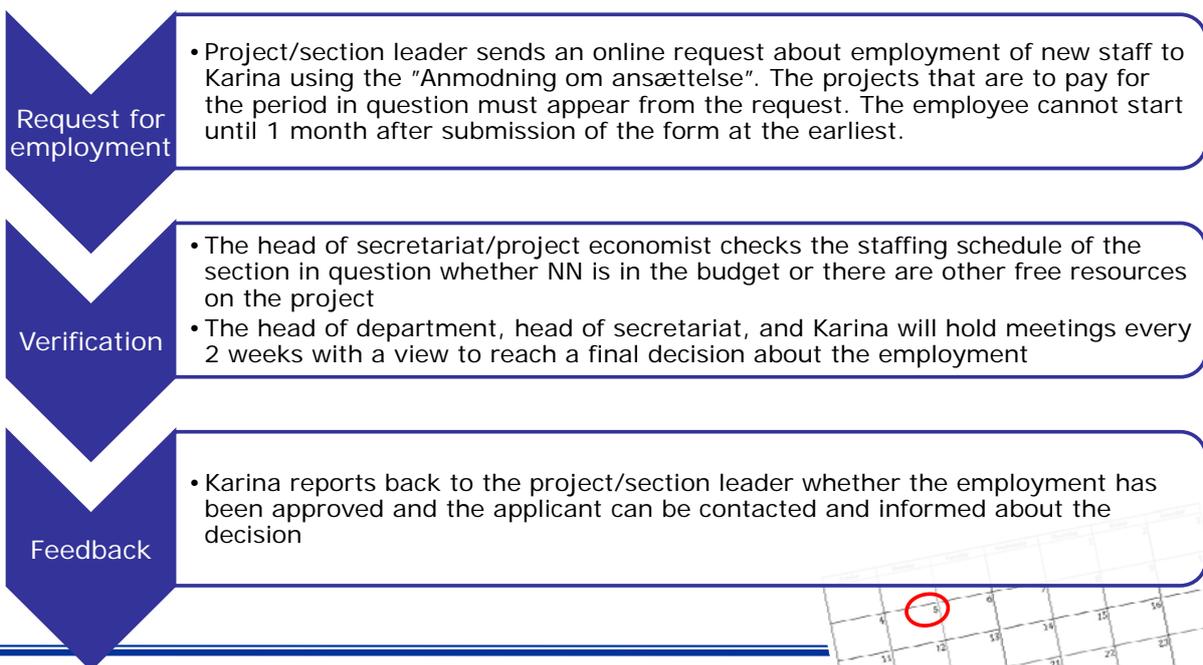
1. More external projects to contribute to the financing of present activities
2. Involving PhDs in advisory projects and externally financed projects
3. Savings on ongoing projects



Plan for future financial control in AGRO

Date	Activity
10-09-2018	ØR3-2018 report to the dean – deadline
11-12. September	Meeting with all employees in Foulum and Flakkebjerg respectively, at which information about the new initiatives in the financial control is given. Including paradigm for future reporting of project descriptions and estimates of budgets at section level.
15-09-2018	Deadline for project economist for updating P.budgets 2019-2022 i Sigurd og Navision
17-09-2018	Case report 2018-2021 to the department management Meeting with BSO about staffing schedule 2019-2022 B19-22, first draft to ESK
18-09-2018	B19-22 meeting with ESK og BSO
18-09-2018	AGRO department management meeting
24-09-2018	First version of staffing schedules for 2019 to the department management B19-22, second draft to ESK
Late September	Work schedule from MFVM
09-10-2018	B19-22 report to the dean - deadline
September- October	Planning and description of projects for YA-MFVM in 2019-21 at project level
22-10-2018	AGRO_B19 meeting with the dean
25-10-2018	AGRO department management meeting, including assessment of the tasks in YA-MFVM
15-11-2018	First proposal for description and staffing of 50-60 projects under YA-MFVM.
21-11-2018	AGRO department management meeting
November- December	50-60 projects under YA-MFVM are discussed in the AGRO department management group
19-12-2018	AGRO department management meeting
20-12-2018	Final description of approx. 50 projects complete with staff and budget 2019-21 under YA-MFVM is ready.

Recruitment process

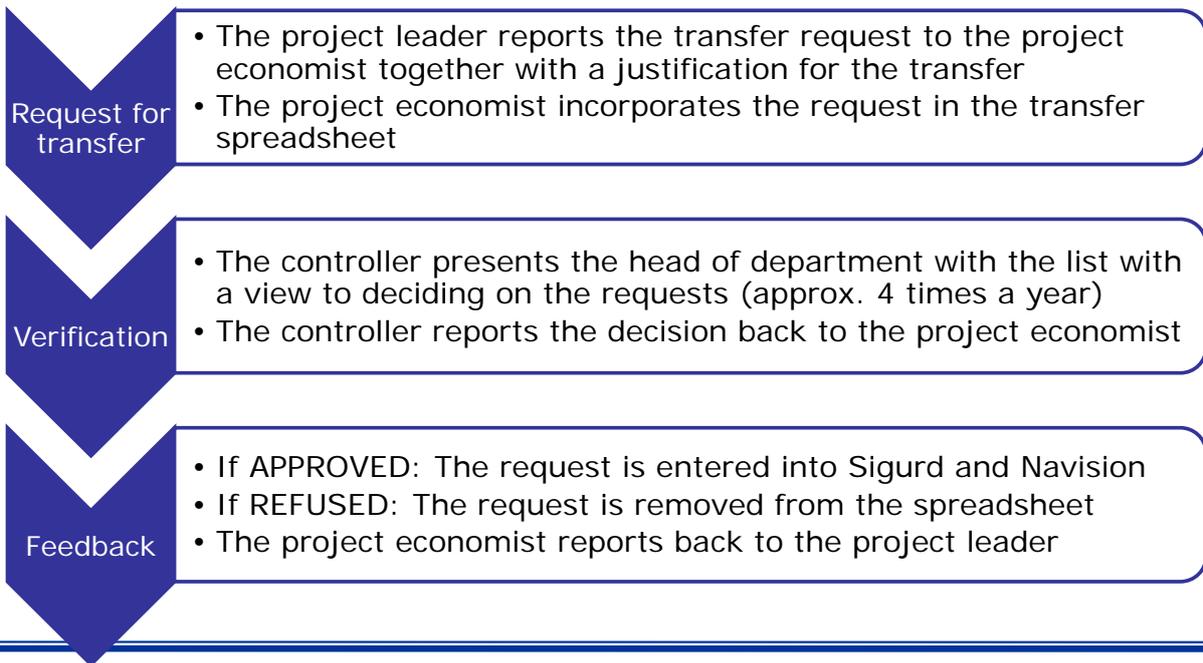


Recruitment process - Online form IN TEST

Anmodning om ansættelse

Info	
Enhedstilknytning*	<input type="text" value="- vælg enhed -"/>
Lønnet tilknytning*	<input type="text" value="- vælg -"/>
Ansættelse (timer pr. uge)*	<input type="text"/>
Personoplysninger	
Fødselsdato*	<input type="text"/>
Navn*	<input type="text"/>

Process for transfer of funds on external projects



JuniorVIP meeting 5 October

- UN's 17 Global Goals
- Industrial Collaboration



SeniorVIP meeting 13-14 November

- UN's 17 Global Goals
- Strategy for Agro and ST 2020-2025



Conclusion



AGRO is doing very well in research-based advice to the Ministry of Environment and Food

We have in 2017-18 made good progress, but we have invested too much in PhDs and in the establishment/operation of research-based advice.

Therefore, there is a need for a better and earlier control of staffing and budgets through:

- Budget planning for 2019 from August 2018
- Internal projects are multi-annual and all activities are described and reported into SIGURD and NAVISION
- Tightened procedure for hiring of new employees
- Tightened procedure for transfers from one year to the next
- Checking up on co-financing for externally financed projects
- Checking up on advance financing through internal funding
- Co-financing of PhD projects
- Cost savings on existing projects.



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